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THE

ANNUAL STATISTICS

of

MANUFACTURES.



1889.

BOSTON:

WRIGHT & POTTER PRINTING CO., STATE PRINTERS, 18 Post Office Square. 1890. M38

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Commonwealth of Massachusetts.

BUREAU OF STATISTICS OF LABOR,
CLAFLIN BUILDING, 20 BEACON STREET,
BOSTON, MAY 20, 1890.

Hon. William E. Barrett, Speaker of House of Representatives.

Sin: —I have the honor to transmit, herewith, the Annual Statistics of Manufactures for the year 1889, which have been collected and are presented in compliance with Chapter 174, Acts of 1886.

Very respectfully,
Your obedient servant,

HORACE G. WADLIN, Chief.

[xi]



THE

ANNUAL STATISTICS OF MANUFACTURES.

1889.

INTRODUCTION.

The present volume is the third of the series of annual reports on the industrial statistics of Massachusetts issued in accordance with the provisions of Chapter 174 of the Acts of 1886.

The first volume, comprising abstracts of the returns for 1886 and 1887, presented statistics for 3,309 establishments which made return of the value of product for one or more of the three years 1885, 1886, and 1887, and permitted comparisons to be made between 1886 and 1887 for 1,027 identical estab-The second volume, comprising abstracts of the returns for 1887 and 1888, presented data derived from 3,517 establishments making return of the value of product for one or more of the three years 1886, 1887, and 1888. parative presentations covered 1,140 identical establishments reporting for 1887 and 1888. The present volume comprises abstracts of the returns for 1888 and 1889, and presents statistics for 3,494 establishments which made return of the value of product for one or more of the three years 1887, 1888, and The comparative presentations are confined, so far as they relate to the years 1888 and 1889, to 1,364 establishments which made returns for both years named.

These volumes on the Statistics of Manufactures do not pretend to present the facts relating to *all* industries, or to cover *all* the establishments engaged in manufacturing or mechanical industry. There is no collection of industrial statistics that can fully replace a census, but these annual abstracts supplement it with a series of statements derived from the comparisons of a number of identical establishments through several consecutive years. A census compares periods, and while one period may be prosperous, as in the case of 1875, the other period may be the reverse, as was the case in 1885. An annual collection, similar to the one now under consideration, enables comparisons to be made by periods and also permits the preparation of a series of exhaustive comparisons between identical establishments for any number of successive years.

In this connection I repeat the text of the general statement made in the volume for 1888: "The comparatively small number of establishments covered in the first volume which was issued, as well as in the present volume, as against the total number of establishments from which returns were received in the Decennial Census of 1885, may, perhaps, lead the reader to inquire how far returns from 3,000 or 4,000 establishments may be indicative of the industrial condition of a State, in which the aggregate number of establishments is reported as more than 23,000. The number of establishments covered by the Decennial Census includes many which, while really establishments of productive industry, would not be popularly considered manufacturing establishments. cludes, for instance, establishments in numerous mechanical industries carried on by persons working singly or aided by a small number of employés, engaged, in many cases, for a part of the time only. Returns from all of these are necessary whenever it is desired to report upon the entire manufacturing and mechanical industries of the State, but, nevertheless, the condition of manufacturing in the Commonwealth can be quite fully portraved by returns from less than 5,000 establishments."

In order to make perfectly clear the full meaning of this statement, I presented a table which exhibited the classified value of goods made for the 83 industries shown in the Census of 1885. This table gave the number of establishments in each industry classified as to value of product, the classification ranging from establishments having an annual product of \$500 or less to those having a product value of \$1,000,000 and over. A recapitulation followed, without regard to industries, giving the number and percentage of establishments in each

class, together with the total value of product in each class, and the average value of product per establishment in each class. For purposes of ready reference this recapitulation is republished here.

		ESTABLI	SHMENTS	Total Value	Average Value of
CLASSIFIED VALUE OF GOODS MADE.		Number	Percent- ages	of Goods Made	Goods Made per Es- tablishment
Under \$500,		2,109	9.00	\$567,157	\$ 269
\$500 but under \$1,000,		2,939	12.54	2,046,123	696
\$1,000 but under \$1,500,		2,121	9.05	2,414,379	1,138
\$1,500 but under \$2,000,		1,557	6.65	2,552,100	1,639
\$2,000 but under \$2,500,		1,309	5.59	2,739,771	2,093
\$2,500 but under \$3,000,		956	4.08	2,492,040	2,607
\$3,000 but under \$3,500,		1,019	4.35	3,111,495	3,053
\$3,500 but under \$4,000,		639	2.73	2,312,929	3,620
\$4,000 but under \$4,500,		682	2.91	2,773,438	4,067
\$4,500 but under \$5,000,		392	1.67	1,813,258	4,626
\$5,000 but under \$6,000,		965	3.86	4,715,708	5,211
\$6,000 but under \$7,000,	.	674	2.88	4,199,840	6,231
\$7,000 but under \$8,000,		565	2.41	4,110,882	7,276
\$8,000 but under \$9,000,		490	2.09	4,024,899	8,214
\$9,000 but under \$10,000,		317	1.35	2,937,569	9,267
\$10,000 but under \$20,000,		2,351	10.03	31,662,292	13,468
\$20,000 but under \$30,000,		1,032	4.41	24,365,921	23,610
\$30,000 but under \$40,000,		606	2.59	20,234,856	33,391
\$40,000 but under \$50,000,		425	1.81	18,426,337	43,356
\$50,000 but under \$75,000,		617	2.63	36,663,233	59,422
\$75,000 but under \$100,000,		346	1.48	29,144,251	84,232
\$100,000 but under \$150,000,		407	1.74	48,362,956	118,828
\$150,000 but under \$200,000,		253	1.08	42,429,922	167,707
\$200,000 but under \$300,000,		286	1.22	67,916,389	237,470
\$300,000 but under \$400,000,		145	0.62	49,057,492	338,328
\$400,000 but under \$500,000,		90	0.38	38,784,544	430,939
\$500,000 but under \$600,000,		59	0.25	31,806,047	539,086
\$600,000 but under \$700,000,		30	0.13	19,035,771	634,526
\$700,000 but under \$800,000,		1 6	0.07	11,878,218	742,389
\$800,000 but under \$900,000,	- 1	15	0.06	12,492,745	832,850
\$900,000 but under \$1,000,000),	`13	0.06	12,404,459	954,189
\$1,000,000 and over,		66	0.28	137,157,248	2,078,140
Totals,		23,431	100.00	\$674,634,269	\$28,792

By drawing the line at those establishments which turned out a product value of \$20,000 or over but under \$30,000, we find that we have for consideration 4,406 establishments, the aggregate value of the product of which, as shown by the Decennial Census, was \$600,160,389, as against a total product of \$674,634,269 for the whole 23,431 establishments. The aggregate product in these 4,406 establishments ranged, by classes, from \$11,878,218 to \$137,157,248; the average product per establishment ranged from \$23,610, in the class containing 1,032 establishments each of which produced goods valued at \$20,000 or over but under \$30,000, to \$2,078,140 in the class containing 66 establishments each with a product value of \$1,000,000 and over. From this it would seem that these 4,406 establishments, in which the value of goods made represents 88.96 per cent of the total value of product shown by the

		:	1885	1885		
	Industries.	All Establish- ments (Census Year 1885)	Total Value of Goods Made	Establishments (Product of \$20,000 and over)	Value of Goods Made	
1	Agricultural implements,	30	\$1,324,597	7	\$1,211,466	
2	Arms and ammunition,	40	2,058,879	12	1,980,982	
3	Artificial teeth and dental work,	489	651,857	_	-	
4	Artisans' tools,	140	2,509,107	26	2,036,106	
5	Awnings, tents, and decorations,	14	108,579	1	40,000	
6	Boots and shoes,	2,366	114,729,533	756	109,451,680	
7	Boxes (paper and wooden),	215	4,332,505	74	3,292,636	
8	Brick, tiles, and sewer pipe,	114	1,541,879	22	813,587	
9	Brooms, brushes, and mops,	72	1,365,373	12	1,081,646	
10	Building,	3,773	39,801,245	511	23,280,093	
11	Burial cases, caskets, coffins, etc.,	113	770,333	8	512,100	
12	Buttons and dress trimmings,	16	1,016,153	7	927,260	
13	Carpetings,	46	6,536,341	12	6,471,985	
14	Carriages and wagons,	1,013	7,277,933	92	4,765,658	
15	Cement, kaolin, lime, and plaster,	16	239,875	3	123,400	
16	Charcoal and kindlers,	11	11,480	-	-	
17	Chemical preparations (compounded),	23	1,165,184	10	1,105,847	
18	Clocks and watches,	47	3,325,199	8	3,222,006	
19	Clothing,	2,402	32,659,837	230	26,022,138	
20	Concrete walks, paving, etc.,	20	150,798	1	25,000	
21	Cooking, lighting, and heating apparatus, .	65	3,131,582	31	2,856,459	
22	Cordage and twine,	52	5,077,261	21	4,924,404	
23	Corks, bungs, and taps,	4	144,000	4	144,000	
24	Cotton goods,	165	61,425,097	148	61,269,604	
25	Cotton, woollen, and other textiles,	4	2,394,583	4	2,394,583	
26	Crayons, pencils, crucibles, etc.,	7	104,490	2	72,910	
27	Drugs and medicines,	916	4,722,838	28	3,102,479	

23,431 establishments reporting for the Census of 1885, might be considered as fairly indicative of the business done in the Commonwealth could we secure returns from them each year.

We will now consider a table which shows the number of establishments, and the value of goods made, for the years 1885, 1886, 1887, 1888, and 1889. The first two columns present the total number of establishments and the total value of goods made according to the Census of 1885. The third and fourth columns present the returns made by the 4,406 establishments each of which had a product value of \$20,000 and over during the Census year 1885. The other columns present the number of establishments and the value of goods made in the years 1886, 1887, 1888, and 1889; these returns forming the basis for the presentations given in the reports on the Statistics of Manufactures.

	1889		1888		1887		1886	
	Value of Goods Made	Estab- lish- ments Re- porting						
1	\$1,330,188	8	\$1,276,435	5	\$1,065,850	4	\$1,143,019	13
2	1,881,306	13	1,829,268	10	1,439,629	8	1,597,437	13
3	_	_	_	_	_	_	-	_
4	1,578,095	23	1,685,804	10	1,602,075	12	1,433,303	55
5	51,810	4	-	-	-	-	-	_
6	85,605,513	563	64,852,079	337	52,376,142	273	59,056,912	505
7	4,226,660	108	1,812,478	23	1,540,910	22	2,521,063	103
8	1,241,896	39	-	_	_	-	-	-
9	1,266,944	22	_	-	- 1	-	-	-
10	_	-	-	-	- 1	-	-	-
11	375,941	8	100,000	1	-	-	-	-
12	828,992	14	303,200	2	119,800	1	- 1	-
13	6,971,678	14	6,328,469	7	4,602,529	6	4,659,437	8
14	3,178,940	64	1,981,105	21	1,730,955	19	2,914,488	126
15	161,150	5	-	-	-	-	-	-
16	-		-	-	-	-	-	-
17	301,428	7	215,722	3	217,714	3	294,247	12
18	759,771	7	569,666	3	967,995	4	550,349	5
19	24,214,668	114	16,585,133	48	14,284,878	48	13,553,356	110
20	-	-	-	-	-	-	-	-
21	3,569,752	35	75,000	1	75,753	1	76,995	1
22	9,791,323	26	6,674,479	11	5,061,084	11	3,168,090	26
23	65,091	4	-1	-	-	-	-	-
24	88,588,148	164	83,913,332	143	75,803,082	142	67,179,425	128
25	3,019,690	3	3,258,241	2	3,963,081	3	4,160,137	3
26	66,420	4	- 1	-	-	-	-	-
27	2,457,501	15	-		-	-	-	-

	4	

			1885	1	1885
	Industries.	All Establish- ments (Census Year 1885)	Total Value of Goods Made	Establishments (Product of \$20,000 and over)	Value of Goods Mad
1	Dyestuffs,	9	\$789,973	8	\$787,4
2	Earthen, plaster, and stone ware,	22	433,213	8	381,60
3	Electrical apparatus and appliances,	40	1,397,737	12	1,159,60
1	Electroplating,	35	214,507	3	75,00
5	Emery and sand paper and cloth, etc.,	13	566,101	8	511,7
3	Fancy articles,	18	81,981	1	36,0
7	Fertilizers,	17	2,778,987	8	2,717,2
3	Fiue arts and taxidermy,	23	42,124	-	
,	Fireworks and matches,	5	91,210	2	63,9
)	Flax, hemp, and jute goods,	9	1,493,623	7	1,483,2
1	Food preparations,	1,711	80,488,329	361	72,560,9
2	Furniture,	603	12,716,908	136	10,811,4
3	Gas and residual products,	66	4,573,962	33	4,245,7
Į	Glass,	20	1,091,949	8	1,012,8
,	Glue, isinglass, and starch,	29	1,306,331	21	1,238,4
;	Hair work (animal and human),	55	442,063	2	317,9
.	Hose: rubber, linen, etc.,	3	790,480	2	781,4
:	Hosiery and knit goods,	60	4,196,522	25	4,045,0
,	Ink, mucilage, and paste,	20	131,626	3	67,0
,	T 1 11 11 1	39	1,628,413	14	1,483,2
	Jewelry burnishing and lapidary work,	7	47,500	1	26,0
		699	28,008,851	206	26,361,2
		3	1,068,489	3	1,068,4
	Liquors and beverages (not spirituous),	63	641,216	8	353,8
5		218	7,881,240	52	7,150,7
,	Liquors: malt, distilled, and fermented,		3,627,345	30	2,313,5
'	Lumber,	466			17,678,1
,	Machines and machinery,	622	20,365,970 41,332,005	176	
	Metals and metallic goods,	2,732		323	34,883,5
•	Mixed textiles,	13	1,323,861	10	1,313,5
1	Models and patterns,	51	258,242	1	35,2
	Musical instruments and materials,	93	6,145,008	47	5,908,0
1	Oils and illuminating fluids,	28	2,294,931	14	2,213,9
3	Paints, colors, and crude chemicals,	22	763,034	8	677,6
1	Paper and paper goods,	148	21,223,626	112	20,990,7
5	Perfumes, toilet articles, etc.,	10	409,801	3	371,0
5	Photographs and photographic materials, .	241	936,165	8	239,7
	Polishes and dressing,	65	1,788,412	21	1,605,5
1	Printing, publishing, and bookbinding,	712	16,552,475	136	13,301,3
•	Print works, dye works, and bleacheries, .	96	15,880,843	29	15,573,2
1	Railroad construction and equipment,	15	2,158,224	12	2,136,7
1	Rubber and elastic goods,	41	12,638,741	30	12,563,7
3	Salt,	5	46,890	1	44,3
3	Scientific instruments and appliances,	65	1,227,683	9	1,005,3
Į.	Shipbuilding,	279	2,107,986	27	1,123,6
5	Silk and silk goods,	12	3,501,240	11	3,496,7
3	Sporting and athletic goods,	27	1,079,966	11	963,7
7	Stone,	378	5,508,569	76	3,781,3
8	Straw and palm leaf goods,	47	6,265,287	24	6,211,7
9	Tallow, candles, soap, and grease,	155	3,474,890	29	2,930,30

	1889		1888		1887		1886	1
	Value of Goods M ade	Estab- lish- ments Re- porting	Value of Goods Made	Estab- lish- ments Re- porting	Value of Goods Made	Estab- lish- ments Re- porting	Value of Goods Made	Estab- lish- ments Re- porting
1	\$1,247,409	7	_	_	_	-	_	
2	164,773	4	_	_	_	_	_	
3	3,259,738	6	_	_	_			_
4	103,052	10	_	_				
5	970,304	11	\$171,720	2	_		\$7,589	1
6	200,307	7	Q171,120		_		\$1,030	
7	143,400	4	60,000	1	\$914,581	2	1,571,308	9
s	13,168	3	- 00,000		Q014,001	_	1,011,000	_
9	52,380	3	_		-	_	_	_
10	1,450,937	5	1,744,076	5	1,446,729	5	1,503,199	7
11	52,362,751	230	42,622,549	80	18,269,244	62	16,479,958	220
12	8,116,415	123	5,492,515	50	5,354,156	49	6,128,845	124
13	3,110,413	120	5,492,515	20	5,354,150	49	0,125,549	124
14	502 700	9	100 000	1	F10 200	-	070 190	7
15	585,729	13	462,339	5	510,299	6	378,132	,
	774,127		-	-	-	_	-	_
16	372,080	4	-	-	-	_	~	-
17	621,200	5	550,000	1	357,000	1	_	-
18	4,343,794	32	4,198,174	13	4,443,054	13	3,748,913	22
19	331,570	7	_	-	-	-	-	-
20	886,369	12	-	-	-	-	- ,	-
21	7,000	2	-	-	-	-	-	-
22	19,434,789	155	16,565,191	107	14,657,259	86	16,478,945	141
23	1,191,446	3	1,299,951	3	1,299,153	3	1,235,128	4
24	238,241	6	-	-	-	-	-	-
25	6,620,814	38	5,161,633	24	4,175,636	22	4,175,936	52
26	1,792,536	22	3,600	1	-	-	5,005	1
27	24,374,215	186	17,042,695	86	11,845,923	78	15,000,858	246
29	33,075,810	287	23,726,390	129	14,769,343	111	19,084,569	296
29	5,805,698	17	1,474,023	15	2,579,584	11	1,728,750	12
30	281,413	7	-	-	-	-	-	-
31	5,077,914	43	4,245,525	24	3,674,034	21	3,729,680	31
3:	1,246,819	9	263,760	1	305,580	1	240,000	1
38	1,011,554	16	-	-	-	-	- 1	-
3-	20,656,498	88	19,161,843	72	13,707,854	56	15,669,570	84
38	19,000	1	-	-	-	-	-	-
36	253,392	7	-	-	-	-	-	-
37	1,198,349	16	-		_	-	-	-
35	1,636,695	20	-	-	_	-	-	-
30	15,151,068	22	14,255,558	19	15,367,373	16	14,348,384	40
40	3,674,493	8	156,745	1	96,011	1	86,361	1
47	20,969,145	33	15,321,639	21	9,364,640	21	6,800,813	20
42	-	-	-	-	-	-	-	-
43	1,133,337	14	_	-	3,600	1	-	-
44	1,520,286	34	587,432	5	285,000	3	650,516	115
45	4,662,767	10	4,118,398	8	4,062,809	11	3,862,655	9
46	212,005	7	-	-	-	-	-	_
47	3,237,429	68	1,791,586	21	1,456,386	14	2,979,499	131
48	3,098,150	17	4,750,857	19	2,851,614	15	2,817,199	20
	3,156,521	42	2,304,611	13	1,583,806	11	2,611,753	73

					1	1885	1	1885
	Industries.			All Establish- ments (Census Year 1885)	Total Value of Goods Made	Establishments (Product of \$20.000 and over)	Value of Goods Made	
1	Tobacco, snuff, and cigars,				302	\$2,813,084	34	\$1,835,173
2	Toys and games (children's)	,			15	316,895	5	257,207
3	Trunks and valises,				25	346,720	6	219,300
1	Whips, lashes, and stocks,				60	1,052,401	15	902,200
5	Wooden goods,				534	4,767,726	61	3,033,681
6	Woollen goods,				189	31,748,278	155	31,502,240
7	Worsted goods,			,	23	11,198,148	20	11,179,248
8	ALL INDUSTRIES, .				23,431	\$674,634,269	4,406	\$600,160,389

In 1885, the total number of establishments in Boots and Shoes was 2,366; this number included the cobbler working by himself, and producing goods valued at or under \$500, as well as the manufacturer employing hundreds of operatives and turning out a product valued at \$1,000,000 or over. aggregate product realized by these 2,366 establishments in 1885 was \$114,729,533. Considering those establishments with a product value of \$20,000 and over, we find they number 756 and have an aggregate value of goods made of \$109,-451,680. In 1886, returns were made by 505 establishments, producing goods valued at \$59,056,912, or more than one-half of the total product for 1885. Finding, upon examination, that a number of establishments with a small annual product were included in the returns for that year, it was decided to omit them when sending out the schedules for 1887, and only 273 establishments made return for that year, having for the total value of product \$52,376,142, within \$6,680,770 of the product of the 505 establishments reporting in 1886.

A due allowance must be made for the natural increase in value of goods made as well as for the fact that new establishments were springing into existence and old establishments were retiring, when considering these figures. Our purpose here is simply to show the method adopted by this office to secure returns that could be considered thoroughly representative. Continuing the review of Boots and Shoes, we find that, in 1888, 337 establishments returned a value of product which reached \$64,852,079, considerably more than one-half of the value of product turned out by the 2,366 establishments in

	1889		1888		1887		1886		
,	Value of Goods Made	Estab- lish- ments Re- porting	Value of Goods Made	Estab- lish- ments Re- porting	ne of lish-ments Goods Made Re-		Value of Goods Made	Estab- lish- ments Re- porting	
7	\$2,119,677	41	-	-	_	_	_	_	
2	474,172	9	-	- 1	-	-	\$7,849	1	
7	231,077	8	-	-	-	-	-	_	
2	785,912	13	\$205,310	1	-	_	-	_	
8	4,088,678	93	1,490,112	19	\$1,671,811	18	2,679,326	143	
5	32,287,745	133	28,856,987	99	26,945,862	97	27,741,301	114	
2	11,337,932	20	6,131,390	16	6,466,572	16	6,048,037	14	
5	\$549,594,985	3,254	\$415,677,020	1,488	\$333,316,390	1,308	\$340,108,336	3,047	

the Census year. In 1889, our mailing list was increased by the addition of names which had not been included since the Census year 1885, and we secured returns from 563 establishments in which the aggregate value of product was \$85,605,513.

It is thus seen that the addition of 226 establishments to the number reporting in 1888 increased the value of goods made in this industry \$20,753,434, or an average per establishment of \$91,829; this average indicates that the new establishments were nearly all of smaller productive capacity than the 337 establishments considered in 1888 or the 273 establishments considered in 1887, the average product per establishment in those years being \$192,439 and \$191,854, respectively.

The peculiarities of this table cannot, perhaps, be better shown than in the line for Food Preparations. We find 1,711 establishments in 1885, with a total value of goods made of \$80,488,329, or an average of \$47,042 per establishment. 361 establishments having a product value of \$20,000 and over produced goods aggregating \$72,560,971 in value, or an average of \$201,000 per establishment. In 1886 returns were made by 220 establishments, the value of product amounting to \$16,479,958, or an average of \$74,909 for each establishment. We find that, in 1887, returns were made by 62 establishments and the value of product was \$18,269,244, or an average for each establishment of \$294,665. The 80 establishments reporting an aggregate value of product in 1888 of \$42,622,549 exhibit an average value per establishment of \$532,782, while the 230 establishments which made return in 1889 show an average product for each establishment of \$227,-

664, the aggregate value of goods made in that year being \$52,362,751. The addition of 150 establishments of small productive capacity increased the aggregate value of goods made \$9,740,202, and decreased the average product per establishment \$305,118.

In All Industries, 23,431 establishments, as before stated, produced goods to the value of \$674,634,269 during the Census year 1885, of which 4,406 establishments, each having a product value of \$20,000 and over, produced goods valued at \$600,160,389 in 1885. In 1886, 3,047 establishments reported an aggregate value of product of \$340,108,336; in 1887, 1,308 establishments produced goods to the value of \$333,-316,390; in 1888, 1,488 establishments returned the value of goods made as \$415,677,020; and in 1889, 3,254 establishments reported a value of product of \$549,594,985.

In the following presentation, we reduce the figures given in the preceding table to percentages, considering both the establishments making return for the Census year 1885 and the aggregate value of goods made in the Census year 1885 as 100 per cent. The percentages relate to the years 1886, 1887, 1888, and 1889. The percentages of establishments and of value of goods made are also given for those establishments in 1885 which each had a product value of \$20,000 or over. The dashes indicate the lack of returns for certain industries in certain years. In some instances the value of product exceeded that for 1885, or 100 per cent, and in such cases the percentage is in excess of 100.

Industries, etc.	PERC	PERCENTAGES REPRESENTED IN THE YEAR-						
industries, etc.	1885	1886	1887	1888	1889			
Agricultural Implements.								
Establishments,	23.33 91.46	43.33 86.29	13.33 80.47	16.67 96.36	$ \begin{array}{c c} 26.67 \\ 100.42 \end{array} $			
Arms and Ammunition.		,						
Establishments,	30.00 96.22	32.50 77.59	20.00 69.92	25.00 88.85	$\begin{array}{c c} 32.50 \\ 91.38 \end{array}$			
Artisans' $Tools$.								
Establishments,	18.57 81.15	39.29 57.12	8.57 63.85	7.14 67.19	16.43 62.89			

Typyggpyng pmg	Perce	NTAGES RE	EPRESENTEI	IN THE Y	EAR-
Industries, etc.	1885	1886	1887	1888	1889
Awnings, Tents, and Decorations. Establishments,	7.14 36.84	<u>-</u> -	-	-	$\frac{28.57}{47.72}$
Boots and Shoes. Establishments, Value of goods made,	31.95 95.40	21.34 51.47	$11.54 \\ 45.65$	10.02 56.53	$\frac{23.80}{74.62}$
Boxes (Paper and Wooden). Establishments, Value of goods made,	34.42 76.00	47.91 58.19	10.23 35.57	10.70 41.83	50.23 97.56
Brick, Tiles, and Sewer Pipe. Establishments,	19.30 52.77	<u>-</u>	_ _	_ _	34.21 80.54
Brooms, Brushes, and Mops. Establishments, Value of goods made,	16.67 79.22	<u> </u>			30.56 92.79
Building. Establishments,	13.54 58.49	_ _			
Burial Cases, Caskets, Coffins, etc. Establishments, Value of goods made,	7.08 66.48		_ _	0.88 12.98	7.08 48.80
Buttons and Dress Trimmings. Establishments, Value of goods made,	43.75 91.25		6.25 11.79	12.50 29.84	87.50 81.58
Carpetings. Establishments,	26.09 99.02	17.39 71.29	13.04 70.41	15.22 96.82	30.48 106.66
Carriages and Wagons. Establishments,	$9.08 \\ 65.48$	12.44 40.05	1.88 23.78	2.07 27.22	6.32 43.68
Cement, Kaolin, Lime, and Plaster. Establishments, Value of goods made,	18.75 51.03	-			31.2ã 67.18
Chemical Preparations (Compounded). Establishments,	43.48 94.91	52.17 25.25	13.04 18.69	13.04 18.51	30.43 25.87

T			PERC	ENTAGES R	EPRESENTE	D IN THE	ZEAR —
INDUSTRIES, ETC.	.,		1885	1886	1887	1888	1889
Clocks and Watch	ies.						
Establishments, Value of goods made, .	:	:	17.02 96.90	$10.64 \\ 16.55$	8.51 29.11	6.38 17.13	14.89 22.85
${\it Clothing.}$							
Establishments, Value of goods made, .	:	:	$9.58 \\ 79.68$	4.58 41.50	$\begin{vmatrix} 2.00 \\ 43.74 \end{vmatrix}$	$\begin{bmatrix} 2.00 \\ 50.78 \end{bmatrix}$	4.75 74.14
Concrete Walks, Pavi	ng, et	o .					
Establishments, Value of goods made, .	:		5.00 16.58	_	_	-	-
Cooking, Lighting, and Apparatus.	Hear	ting					
Establishments, Value of goods made, .	:	:	47.69 91.21	$\begin{array}{ c c c }\hline 1.54 \\ 2.46 \\ \end{array}$	$1.54 \\ 2.42$	$\frac{1.54}{2.39}$	53.85 113.99
Cordage and Twi	ine.						
Establishments, Value of goods made, .	:		$\begin{vmatrix} 40.38 \\ 96.99 \end{vmatrix}$	$\begin{bmatrix} 50.00 \\ 62.40 \end{bmatrix}$	$\begin{vmatrix} 21.15 \\ 99.68 \end{vmatrix}$	$21.15 \\ 131.46$	50.00 192.85
Corks, Bungs, and	Taps.						
Establishments, Value of goods made, .	:		100.00	-	_ _	-	$\begin{vmatrix} 100.00 \\ 45.20 \end{vmatrix}$
Cotton Goods.							
Establishments, Value of goods made, .	:		89.70 99.75	77.58 109.37	$ \begin{array}{r} 86.06 \\ 123.41 \end{array} $	86.67 136.61	99.39 144.22
Cotton, Woollen, and Othe	r Text	tiles.					
Establishments, Value of goods made, .	:	:	100.00	$75.00 \\ 173.73$	$75.00 \\ 165.50$	50.00 136.07	$75.00 \\ 126.11$
Crayons, Pencils, Cruc	ibles,	etc.					
Establishments, Value of goods made, .	:		$\begin{vmatrix} 28.57 \\ 69.78 \end{vmatrix}$	-	_	-	$57.14 \\ 63.57$
Drugs and Medici	nes.						
Establishments, Value of goods made, .	•	:	3.06 65.69		-	-	$\frac{1.64}{52.03}$
Dyestuffs.							
Establishments, Value of goods made, .	:	:	88.89 99.68		-	-	77.78 157.91
Earthen, Plaster, and Ste	one W	are.					
Establishments, Value of goods made, .		:	36.36 88.09			-	$\frac{18.18}{38.04}$

. INDUSTRIES, ETC.	PER	CENTAGES R	EPRESENTE	D IN THE Y	EAR —
INDUSTRIES, E10.	1885	1886	1887	1888	1889
Electrical Apparatus and Appliances.					
Establishments,	30.00 82.97	-	_	-	$15.00 \\ 233.22$
Establishments, Value of goods made,	8.57 34.97			-	28.57 48.04
Emery and Sand Paper and Cloth, etc.					
Establishments,	61.54 90.40		_ _	15.38 30.33	84.62 171.40
Fancy Articles.					
Establishments,	5.56 43.91			_	38.89 244.33
Fertilizers.	47.00	50.04	11 70	200	23.53
Establishments,	47.06 97.78	$\begin{bmatrix} 52.94 \\ 56.54 \end{bmatrix}$	$\begin{vmatrix} 11.76 \\ 32.91 \end{vmatrix}$	5.88 2.16	5.16
Fine Arts and Taxidermy.					
Establishments,	_		-		13.04 31.26
Fireworks and Matches.					
Establishments,	$\begin{vmatrix} 40.00 \\ 70.07 \end{vmatrix}$		_	-	60.00 57.43
Flax, Hemp, and Jute Goods.					
Establishments,	$\begin{array}{c c} 77.78 \\ 99.30 \end{array}$		55.56 96.86	55.56	55.56 97.14
Food Preparations.					
Establishments, Value of goods made,	$\begin{vmatrix} 21.10 \\ 90.15 \end{vmatrix}$		$\begin{bmatrix} 3.62 \\ 22.70 \end{bmatrix}$	$\frac{4.68}{52.95}$	13.44 65.06
Furniture.					
Establishments, Value of goods made,	$\begin{array}{c c} 22.55 \\ 85.02 \end{array}$		8.13 42.10	8.29 43.19	$\begin{array}{c} 20.40 \\ 63.82 \end{array}$
Gas and Residual Products.					
Establishments, Value of goods made,	$\begin{array}{c c} 50.00 \\ 92.82 \end{array}$]	_	-
Glass.					
Establishments, Value of goods made,	$\begin{array}{c c} & 40.00 \\ 92.76 \end{array}$		$\begin{vmatrix} 30.00 \\ 46.73 \end{vmatrix}$	$25.00 \\ 42.34$	45.00 53.64

Tunnan and	PERC	ENTAGES R	EPRESENTE	D IN THE Y	EAR-
Industries, etc.	1885	1886	1887	1888	1889
Glue, Isinglass, and Starch. Establishments, Value of goods made,	72.41 94.80	=	=	_	44.83 59.26
Hair Work (Animal and Human). Establishments, Value of goods made,	$\begin{vmatrix} 3.64 \\ 71.92 \end{vmatrix}$	- -		 - -	7.27 84.17
Hose: Rubber, Linen, etc. Establishments, Value of goods made,	66.67 98.86		33.33 45.16	33.33 69.58	166.67 78.59
Hosiery and Knit Goods. Establishments, Value of goods made,	41.67 96.39	36.67 89.33	21.67 105.87	21.67 100.04	53.33 103.51
Ink, Mucilage, and Paste. Establishments, Value of goods made,	15.00 50.90			<u>-</u>	35.00 251.90
Ivory, Bone, Shell, and Horn Goods, etc. Establishments, Value of goods made,	35.90 91.09	_ 			30.77 54.43
Jewelry Burnishing and Lapidary Work. Establishments,	14.29 54.74	_		_	28.57 14.74
Leather. Establishments,	29.47 94.12	20.17	12.30 52.33	15.31 59.14	22.17 69.39
Linen. Establishments,	100.00 100.00	133.33 115.60	100.00 121.59	100.00 121.66	100.00 111.51
Liquors and Beverages (Not Spirituous). Establishments, Value of goods made,	12.70 55.18	-	_		9.52 37.15
Liquors: Malt, Distilled, and Fermented. Establishments,	23.85	23.85	10.09	11.01	17.43
Value of goods made,	90.73	52.99	52.98	65.49	84.01

Typycarnyng pro	PERC	ENTAGES R	EPRESENTE	D IN THE Y	EAR-
Industries, etc.	1885	1886	1887	1888	1889
Lumber.					
Establishments,	$6.44 \\ 63.78$	0.21 0.14	_	0.21 0.10	4.72 49.42
Machines and Machinery.					
Establishments,	28.30 86.80	39.55 73.66	$\begin{vmatrix} 12.54 \\ 58.17 \end{vmatrix}$	13.83 83.68	$\begin{vmatrix} 29.90 \\ 119.68 \end{vmatrix}$
Metals and Metallic Goods.					
Establishments,	11.82 84.40	$10.83 \\ 46.17$	$\begin{vmatrix} 4.06 \\ 35.73 \end{vmatrix}$	$\begin{bmatrix} 4.72 \\ 57.40 \end{bmatrix}$	$ \begin{array}{c c} 10.51 \\ 80.02 \end{array} $
Mixed Textiles.					
Establishments,	76.92 99.22	$92.31 \\ 130.58$	84.62 194.87	115.38 111.34	130.77 438.54
Models and Patterns.					
Establishments,	1.96 13.65	_	-	=	13.73 108.97
Musical Instruments and Materials					
Establishments,	50.54 96.14	33.33 60.69	$\begin{bmatrix} 22.58 \\ 59.79 \end{bmatrix}$	$\begin{bmatrix} 25.81 \\ 69.09 \end{bmatrix}$	$45.74 \\ 82.63$
Oils and Illuminating Fluids.					
Establishments,	50.00 96.47	$\begin{vmatrix} 3.57 \\ 10.46 \end{vmatrix}$	$\begin{vmatrix} 3.57 \\ 13.32 \end{vmatrix}$	$3.57 \\ 11.49$	$32.14 \\ 54.33$
Paints, Colors, and Crude Chemicals.			1		
Establishments,	36.36 88.81	_	-	-	$72.73 \\ 132.57$
Paper and Paper Goods.					
Establishments,	75.68 98.90	56.76 73.88	37.84 64.59	$\frac{48.65}{90.29}$	59.46 97.33
Perfumes, Toilet Articles, etc.					
Establishments,	30.00 90.53	_	-	_	10.00 4.64
Photographs and Photographic Materials.	d				
Establishments,	$3.32 \\ 25.61$	_	_	Ξ	$\frac{2.90}{27.07}$
Polishes and Dressing.					
Establishments,	32.31 89.77	_	=	_	$\frac{24.62}{67.01}$

xxviii STATISTICS OF MANUFACTURES. [Pub. Doc.

Typyrome	PERC	ENTAGES R	EPRESENTE	D IN THE Y	EAR-
Industries, etc.	1885	1886	1887	1888	1889
Printing, Publishing, and Book- binding.					
Establishments,	19.10 80.36	_		-	2.81 9.89
Print Works, Dye Works, and Bleacheries.					
Establishments,	$ \begin{array}{c} 30.21 \\ 98.06 \end{array} $	41.67 90.35	16.67 96.77	19.79 89.77	22.92 95.40
Railroad Construction and Equipment.	-				
Establishments,	80.00 99.00	6.67 4.00	6.67 4.45	$6.67 \\ 7.26$	53.33 170.26
Rubber and Elastic Goods.			•		
Establishments,	73.17 99.41	48.78 53.81	$51.22 \\ 74.09$	$51.22 \\ 121.23$	80.49 165.91
Salt.	:				
Establishments,	$20.00 \\ 94.52$	-	_	_	-
Scientific Instruments and Appliances.					
Establishments,	13.85 81.89		1.54 0.29	_	$21.54 \\ 92.32$
Shipbuilding.					
Establishments,	$9.68 \\ 53.30$	41.22 30.86	1.08 13.52	$\frac{1.79}{27.87}$	12.19 72.12
Silk and Silk Goods.					
Establishments,	91.67 99.87	75.00 110.32	91.67 116.04	66.67 117.63	83.33 133.17
Sporting and Athletic Goods.					
Establishments,	$\begin{array}{c} .40.74 \\ .89.24 \end{array}$	-	-	-	$25.93 \\ 19.63$
Stone.					
Establishments,	20.11 68.64	$\begin{vmatrix} 34.66 \\ 54.09 \end{vmatrix}$	$\begin{vmatrix} 3.70 \\ 26.44 \end{vmatrix}$	$\begin{bmatrix} 5.56 \\ 32.52 \end{bmatrix}$	17.99 58.77
Straw and Palm Leaf Goods.					
Establishments,	51.06 99.15	$\begin{vmatrix} 42.55 \\ 44.97 \end{vmatrix}$	31.91 45.51	$\begin{vmatrix} 40.43 \\ 75.83 \end{vmatrix}$	$ \begin{array}{r} 36.17 \\ 49.45 \end{array} $

	PERCI	entages Ri	EPRESENTEI	IN THE Y	EAR —
INDUSTRIES, ETC.	1885	1886	1887	1888	1889
Tallow, Candles, Soap, and Grease.					
Establishments,	18.71 84.33	$\begin{vmatrix} 47.10 \\ 75.16 \end{vmatrix}$	7.10 45.58	$\begin{array}{c} 8.39 \\ 66.32 \end{array}$	$\frac{27.10}{90.84}$
Tobacco, Snuff, and Cigars.					
Establishments,	11.26 65.24	_	-	-	$13.58 \\ 75.35$
Toys and Games (Children's).					
Establishments,	33.33 81.16	$\begin{bmatrix} 6.67 \\ 2.48 \end{bmatrix}$	-		60.00 149.63
Trunks and Valises.					
Establishments,	24.00 63.25	_	-	-	32.00 66.65
Whips, Lashes, and Stocks.					
Establishments,	25.00 85.73			$\begin{vmatrix} 1.67 \\ 19.51 \end{vmatrix}$	21.67 74.68
Wooden Goods.					
Establishments,	11.42 63.63	$\begin{vmatrix} 26.78 \\ 56.20 \end{vmatrix}$	$\begin{bmatrix} 3.37 \\ 35.07 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	17.42 85.76
Woollen Goods.					
Establishments,	82.01 99.23	60.32 87.38	51.32 84.87	52.38 90.89	70.37 101.70
Worsted Goods.					
Establishments,	86.96 99.83	60.87 54 01	69.57 57.75	69.57 54.75	86.96 101.25
ALL INDUSTRIES.					
Establishments, Value of goods made,	18.80 88.96	13.00 50.41	5.58 49.41	$\begin{bmatrix} 6.35 \\ 61.62 \end{bmatrix}$	13.89 81.47

This table is easily understood and will not require any further remark than to point out the manner of reading it. In the boot and shoe industry, we find that the establishments each having a product value of \$20,000 and over, in 1885, represented 31.95 per cent of all establishments in that industry in the Census year 1885, and produced goods amounting in value to 95.40 per cent of the total output of the industry for that

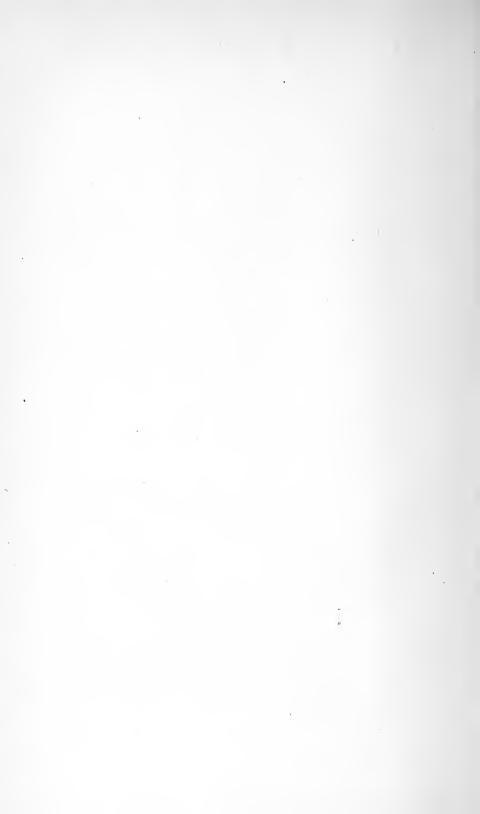
year. In 1886 the percentage of establishments was 21.34, and the percentage of product was 51.47; in 1887 the percentage of establishments was 11.54 of the number in 1885 and the percentage of product was 45.65 of the total value of goods made in 1885; in 1888 the percentage of establishments declined to 10.02, while the percentage of product increased to 56.53; and in 1889 the percentage of establishments rose to 23.80 and the value of product to 74.62 per cent, respectively, of the aggregate number of establishments and of the aggregate value of goods made in that industry in the Census year 1885.

We now present, for 14 industries, a table which shows the average value of goods made per establishment in each year. The first column shows the average value of goods made for each establishment according to the Census of 1885, the second column gives the average value of product for each of the establishments which had an annual output of \$20,000 and over in 1885, while the remaining columns present the average value of goods made in each of the establishments considered for the years 1886, 1887, 1888, and 1889. These averages have been obtained by dividing the total product in each industry by the number of establishments in each industry, and are drawn from the table on pages xvi to xxi.

Industries.				AVERA	GE VALUE		S MADE PE E YEAR—	ER ESTABL	SHMENT
INDUSTRIES.				1885	1885	1886	1887	1888	1889
Boots and shoes,				\$48,491	\$144,777	\$116,944	\$191,854	\$192,439	\$152,052
Carpetings,				142,094	530,999	582,430	767,088	904,067	497,977
Carriages and wagons,				7,185	51,801	23,131	91,103	94,338	49,671
Clothing,				13,597	113,140	123,212	297,602	345,524	212,409
Cooking, lighting, and hea	ting	gapp	oa-						
ratus,				48,178	92,144	76,995	75,753	75,000	101,993
Cordage and twine, .				97,640	234,495	121,850	460,099	606,771	376,589
Cotton goods,				372,273	413,984	524,839	533,825	586,807	540,172
Food preparations, .				47,042	201,000	74,909	294,665	532,782	227,664
Furniture,				21,089	79,496	49,426	109,268	109,850	65,987
Hosiery and kuit goods,				69,942	161,802	170,405	341,773	322,936	135,744
Leather,				40,070	127,967	116,872	170,433	153,880	125,386
Machines and machinery,				32,743	100,444	60,979	151,871	198,171	131,044
Metals and metallic goods,				15,129	107,999	64,475	133,057	183,926	115,247
Paper and paper goods,				143,402	187,418	186,543	244,783	266,137	234,733
Other industries,			•	21,910	110,899	95,948	272,904	277,958	140,930
ALL INDUSTRIES,				\$28,792	\$136,214	\$111,621	\$254,829	\$279,353	\$168,898

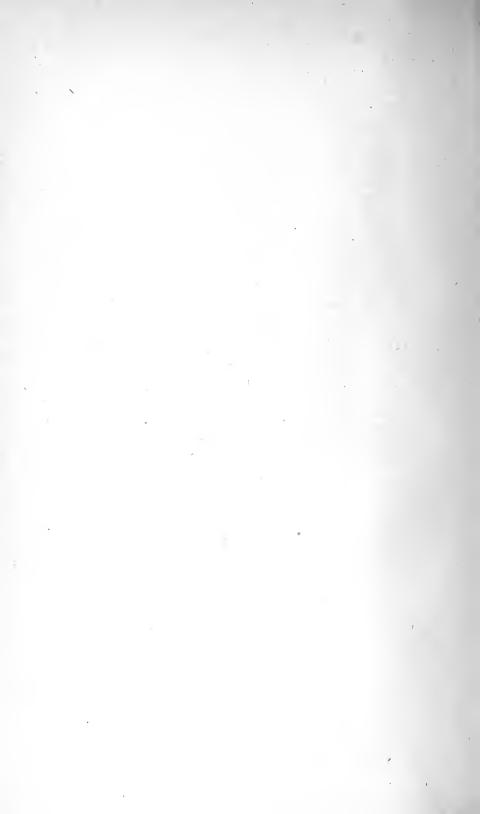
Summarizing the results shown in these presentations, I conclude that if the plan outlined in the report on the Statistics of Manufactures for 1888, and followed by the enlarging of the mailing list, is developed within reasonable limits I shall be enabled to present returns from a much larger number of establishments. In order that it may be settled decisively whether or not a small number of representative establishments in the leading industries are as indicative of the trend of business as a larger number of smaller establishments whose annual product may range from \$5,000 to \$50,000, I purpose publishing, in the next volume in this series, a table which will show the percentages of increase, respectively, in establishments of a high grade of product value, of a low grade of product value, and of a medium grade of product value. Thus I shall be able finally, to secure returns from a sufficient number of establishments to indicate clearly the increase or decrease in the manufacturing industries of the Commonwealth, and by the aid of comparisons for the same establishments, I shall be able to show the actual industrial progress from year to year. With the aid of the manufacturers, which has always been cheerfully given this office, we can build up a series of industrial comparisons that will be of both present and permanent value to Massachusetts and her manufacturing interests.

The final schedules were received from the manufacturers and the work of tabulation began April first. The tabular presentations, percentages, and analysis have been prepared and the volume issued since that date, thus giving the results to the public with a promptness that I am sure will be appreciated when the labor involved is considered. The fidelity and efficiency of the clerical force deserves my acknowledgment here; and I also return my thanks to Mr. Charles F. Pidgin, Chief Clerk, who has had general executive charge, and to Mr. Frank H. Drown, Second Clerk. Mr. Drown has had direct control of the field work and the clerical service necessary to the completion of the report, and his experience in connection with the manufacturing industries of the Commonwealth has materially contributed to the promptness with which the volume has been prepared.



COMPARATIVE PRODUCT: BY ESTABLISHMENTS.

1887, 1888, 1889.



COMPARATIVE PRODUCT: BY ESTABLISHMENTS.

1887, 1888, 1889.

[In this presentation, the establishments are arranged without regard to industries in order to avoid disclosing the private business of any firm or corporation. The figures on each line, for the three years mentioned, are for the same establishment.

The dash (-), when used in the columns for 1887, 1888, or 1889, indicates either the absence of any return, a suspension of business for some cause, or when used only in the columns for 1887 and 1888, in conjunction with a return of value of product for 1889, indicates that the establishment was not in existence in 1887 and 1888, or that the first return of value of product was made for the year 1889.

ESTABLISH-	Valui	e of Goods	MADE	ESTABLISH-	VALU	E OF GOODS	MADE
MENT NUMBER.	1887	1888	1889	MENT Number.	1887	1888	1889
1	\$184,157	\$176,070	\$156,754	30	\$160,675	\$212,767	\$273,424
2	205,194	247,764	254,881	31	-	-	103,000
3	511,000	545,600	552,387	32	13,600	18,980	_
4	168,540	215,192	193,429	33	133,702	114,000	_
5	74,306	78,501	77,535	34	80,000	115,000	109,250
6	67,500	88,000	80,000	35	-	35,000	50,200
7	240,200	245,460	242,700	36	219,745	272,966	335,000
8	930,347	771,909	809,450	37	80,000	80,000	100,000
9	300,961	392,000	303,444	38	25,000	30,000	30,000
10	864,826	1,073,151	1,397,687	39	165,438	163,756	195,115
11	674,961	862,467	774,013	40	400,368	453,650	489,140
12	191,787	205,799	182,739	41	394,000	511,798	459,068
13	408,387	392,863	410,284	42	-	300,000	- 1
14	370,780	596,223	349,607	43	320,000	320,475	330,000
15	1,617,577	1,630,515	1,634,424	44	40,000	29,762	27,354
16	42,341	_	50,096	45	63,000	42,500	42,000
17	186,625	182,443	182,071	46	96,350	189,900	114,394
18	137,833	141,255	144,747	47	55,234	60,000	48,000
19	300,000	177,218	377,410	48	155,160	139,000	164,250
20	1,416,500	1,438,656	1,499,626	49	85,001	109,817	113,000
21	2,014,696	2,149,461	2,180,972	50	151,000	125,000	128,000
22	602,264	578,748	672,602	51		13,293	12,962
23	1,197,263	1,240,000	1,290,646	52	90,000	55,000	61,729
24	193,634	152,635	158,181	53	144,432	155,460	151,834
25	709,892	724,961	635,752	54	190,000	170,000	131,447
26	523,049	476,000	-	55	56,755	51,268	30,000
27	550,000	425,000	235,839	56	_	-	127,400
28	-	539,000	629,000	57	763,182	404,740	417,645
29	-	-	38,000	58	614,868	516,783	496,859

 ${\tt COMPARATIVE\ PRODUCT\colon\ BY\ ESTABLISHMENTS-Continued}.$

Establish-	VALUI	e of Goods	MADE	ESTABLISH-	VALUI	e of Goods	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
59	\$286,000	\$249,000	\$248,000	109	_	_ }	\$110,000
60	312,330	385,222	364,946	110	_	_	15,00
61	160,000	131,000	130,000	111	_	_	114,78
62	_		117,600	112	\$112,300	\$190,000	99,00
63	_	_	39,000	113	145,000	· ′ -	· ·
64	95,000	65,000	78,508	114	208,035	95,000	162,93
65	270,720	, _	254,047	115	64,377	70,709	69,43
66	163,807	192,075	194,500	116	170,736	168,657	143,54
67	_	-	37,550	117		-	40,00
68	_	366,603	367,471	118	_	-	47,44
69	243,105	267,468	274,855	119	112,160	85,000	103,72
70	,115,000	120,000	120,000	120	105,000	110,000	115,00
71	718,730	807,122	863,331	121	307,118	296,400	243,32
72	· _	498,432	519,319	122	109,287	129,605	93,60
73	485,077	584,224	538,725	123	_	-	15,31
74	330,337	160,692		124	_	90,400	55,00
75	635,748	509,760	611,597	125	16,000	17,000	25,00
76	89,624	74,993		126	_	-	14,00
77	429,303	435,694	425,889	127	243,610	217,000	175,26
78	1,111,078	1,472,106	1,081,005	128	60,000	61,500	83,00
79	69,840	69,815	58,293	129	231,240	260,000	241,00
80	_	_	16,512	130	_	44,847	51,00
81	_	_	9,000	131	_	96,845	63,08
82	28,698	115,935	104,991	132	165,404	150,319	176,78
83	31,590	31,590	31,894	133	316,650	212,000	212,00
84	_	_	6,300	134	229,145	_	200,00
85	79,200	118,559	69,720	135	333,498	330,755	312,97
86	126,000	325,000	97,840	136	116,337	145,151	121,70
87	142,700	201,974	229,995	137	187,466	247,609	249,13
88	412,573	446,544	465,164	138	279,496	313,665	256,8
89	81,000	182,884	351,373	139		223,254	166,2
90	_	325,000	341,500	140	165,463	165,463	177,29
91	_	_	102,578	141	_	275,000	225,00
92	427,263	666,000	500,000	142	18,000	25,592	41,2
93	_		27,000	143	198,647	217,000	167,18
94	_	251,800	300,000	144		_	4,50
95	125,875	123,945	151,390	145	97,000	90,000	49,70
96	363,524	368,109	384,905	146	185,996	140,286	112,2
97	450,000	_	395,000	147	220,000	225,000	
98	150,000	150,000	150,000	148	_	275,000	
99	_	· -	240,000	149	275,000	265,000	
100	325,121	277,526	245,637	150	62,512	62,500	
101	_	_	526,500	151	_	1,000,000	
102	355,550	320,000	307,150	152	_	387,263	
103			45,000	153	2,694	62,547	
104	105,328	116,263	123,822	154	180,560	125,000	152,54
105		600,000	750,000	155	232,150	235,235	250,0
106	55,000	_		156	288,326	444,288	444,2
107	- 55,500	_	33,500	157	506,684		545,4
108	_		425,000	158	500,000	400,096	400,00
100		_	120,000	130		100,000	1.5,0

ESTABLISH-	VALUI	e of Goods	MADE	ESTABLISH- MENT	VALUI	e of Goods	Млре
MENT NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
159	_	_	\$87,544	209	_	_	\$37,400
160	\$347,000	\$359,500	455,000	210	_	\$330,000	245,535
161	_	211,434	217,950	211	\$75,129	_	_
162	_	_	107,092	212	-	81,600	136,800
163	_	_	7,200	213	-		4,775
164	350,000	254,317	186,398	214	55,012	56,219	58,051
165	45,000	30,000	35,000	215	322,585	374,452	390,780
166	_	400,000	420,000	216	172,717	186,542	191,097
167	-	381,697	359,740	217	472,599	476,090	526,050
168		_	5,000	218	30,990	_	\$5,200
169	1,111,950	1,083,000	1,026,620	219	_ :	64,350	150,000
170	-	222,470	280,000	220	304,388	298,566	265,789
171	411,117	469,045	492,632	221	184,050	181,000	177,000
172	-	_	16,756	222	549,000	593,000	552,000
173	250,000	_	_	223	52,500	52,500	117,000
174	80,000	100,000	120,000	224	118,524	140,005	132,022
175	150,000	180,000	190,000	225	700,000	700,000	800,000
176	-	124,696	188,944	226	271,393	274,268	269,906
177	246,335	260,716	350,000	227	762,261	669,487	761,386
178	233,804	244,582	260,386	228	1,374,326	1,470,658	1,454,938
179	3,547,625	3,785,335	3,818,000	229	521,079	558,879	623,550
180	4,598,751	3,136,156	2,883,616	230	42,289	46,933	-
181	213,716	232,082	225,197	231	440,813	517,957	-
182	137,939	124,670	81,550	232	1,466,787	1,512,635	~
183	-	_	20,796	233	41,000	-	-
184	3,470,987	3,755,652	4,211,004	234	_	70,000	-
185	-	-	12,000	235	335,853	-	-
186	231,656	204,874	205,267	236	412,473	402,451	-
187	-	_	20,056	237	162,770	200,212	-
188	456,288	386,767	507,946	238	300,000	-	-
189	665,227	651,550	692,414	239	-	-	684,745
190	730,579	586,085	654,960	240	124,000	127,000	135,000
191	414,888	445,254	353,441	241	-	-	43,325
192	-	300,000	375,000	242	-	-	193,444
193	-	-	225,000	243	-	-	49,640
194	330,375	351,901	320,486	244	-	-	640,000
195	-	-	33,000	245	-	-	9,700
196	1,264,916	218,000	226,129	246	-	124,000	130,082
197	66,327	71,534	82,334	247	53,843	47,720	50,819
198	79,610	96,000	117,132	248	-	-	200,000
199	80,000	78,000	76,000	249	-	-	75,000
200	182,117	140,668	-	250	-	-	154,012
201	150,000	167,030	-	251	-	-	61,691
202	-	-	480,000	252	-	-	65,000
203	-	-	55,750	253	-	-	50,000
204	192,275	198,178	173,490	254	-	-	54,000
205	300,000	300,000	350,000	255	-	- 1	120,000
206	85,136	85,164	75,215	256	-	-	15,000
207	674,000	711,750	543,000	257	-	-	16,380
208	76,290	81,580	75,000	258	_		21,000

ESTABLISH- MENT	VALUE	of Goods	MADE	ESTABLISH- MENT	VALU	E OF GOODS	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
259	_	_	\$47,500	309	\$157,095	\$151,000	\$164,000
260	\$65,000	\$66,000	59,400	310	_	250,000	_
261	-	-	33,000	311	_	_	11,000
262	_	_	13,730	312	_	_	59,740
263	-	-	67,860	313	66,000	70,500	76,000
264	-	-	20,480	314	_	_	20,050
265	-	-	20,350	315	-	-	2,272
266	-	-	13,500	316	39,380	41,249	45,000
267	-	-	28,625	317	40,000	-	30,000
268	-	-	29,500	318	-	_	9,000
269	243,750	250,000	251,170	319	-	-	35,000
270	-	-	30,000	320	-	-	15,306
271	-	-	9,047	321	_	-	185,000
272	150,000	180,000	120,000	322	199,200	121,500	170,225
273	150,000	155,200	79,600	323	-	-	32,500
274	300,000	800,000	379,400	324	_	-	1,229
275	365,000	395,000	307,130	325	115,000	127,185	137,000
276	-	-	15,350	326	17,000	15,000	15,700
277	17,150	16,005	-	327	-	-	12,965
278	69,974	75,680	61,389	328	-	-	22,500
279	-	-	21,960	329		120,000	120,000
280	-	- 1	520	330	_	-	30,000
281	-	-	33,966	331	_	-	22,000
282	-	-	14,784	332	62,500	-	157,500
283	99,000	105,625	37,165	333	- :	-	111,092
284	-	-	15,100	334	-	-	20,000
285	-	-	48,125	335	11,600	-	13,900
286	-	-	19,125	336	48,205	52,500	40,000
287	-	-	55,308	337	70,000	71,000	70,350
288	53,200	61,400	55,496	338	58,500	56,500	57,000
289	-	-	33,950	339	-	-	21,000
290	-	-	43,299	340	-	-	20,000
291	-	-	16,559	341	-	-	55,050
292	-	-	26,000	342	-	-	8,700
293	233,261	261,262	299,102	343	-	-	20,783
294	480,000	500,000	600,000	344	68,219	65,000	65,819
295	-	-	40,000	345	-	35,000	39,176
296	-	-	45,000	346	-	52,000	62,000
297	-	-	55,000	347	-	~	15,400
298	-	-	240,320	348	-	- i	13,000
299	-	27,000	-	349	-	· -	100,000
300	-	-	70,173	350	1,250,000	1,230,000	1,099,370
301	-	-	70,000	351	-	-	26,631
302 303	-	101 500	88,128	352	32,150	-	-
1	-	121,500	160,640	353	-	57,818	-
304	-	-	25,000	354	-	-	316,000
305	-	-	91,250	355	-	-	7,000
306	-	-	39,250	356	-	-	4,080
307 308	-	-	418,656	357	-	-	35,000
508	-	-	15,955	358	-	-	242,000

ESTABLISH-	VALUE	of Goods I	IADE	ESTABLISH- MENT	VALUE	e of Goods	MADE
MENT NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
359	_	_	\$4,000	409	\$300,000	\$325,000	\$337,000
360	_	-	18,750	410	85,900	100,000	90,000
361	_	-	20,000	411	302,000	302,000	435,541
362	-	_	1,820	412	-	-	38,130
363	-	_	10,000	413	35,000	-	-
364	_	_	26,900	414	-	-	4,350
365	_	\$347,000	483,000	415	-	75,000	123,000
366	- 1	-	12,000	416	-	-	88,388
367	\$79,482	79,482	75,354	417	-	1,500,000	1,500,000
368	78,371	114,708	144,183	418	-	60,000	55,000
369	257,731	98,838	_	419	-	-	32,400
370	157,260	162,627	154,817	420	18,450	-	-
371	301,452	210,860	226,105	421	122,020	-	138,409
372	_	45,000	40,000	422	-	-	61,405
373	51,600	32,549	23,878	423	_	-	40,456
374	156,000	218,840	104,500	424	-	868,404	1,061,470
375	245,354	187,481	161,447	425	_	-	19,770
376	1,130,076	918,075	839,146	426	_	15,000	25,000
377		125,000	61,500	427	_	_	39,120
378	133,000	180,000	55,000	428	_	_	13,775
379	491,400	517,598	633,360	429	_	_	45,973
380	72,450	97,648	_	430	_	98,000	147,500
381	296,373	357,396	276,313	481	76,260	64,397	130,000
382	105,000	96,000	100,776	432	_	154,000	165,000
383	113,235	88,199	159,760	435	54,401	84,827	70,410
384	300,000	173,017	218,380	434	83,480	55,333	72,699
385	171,300	140,000	42,744	435	_	_	29,000
386	300,000	285,050	201,000	436	164,056	167,500	165,000
387	- 000,000	175,000	156,182	437	_	· -	29,500
388		65,132	66,720	438	_	_	18,000
389		445,653	-	439	_	_	10,300
390	409,155	391,295	368,965	440	_	_	31,200
391	398,467	448,384	413,269	441	_	_	30,200
392	500,531	460,272	409,212	442	_	_	3,950
393	300,331	400,212	20,000	443	74,850	81,843	83,223
394	705,339	555,209	670,239	144	-		17,814
395	100,003	- 000,200	14,000	445	_	_	33,500
396			52,380	446	_	_	25,000
397			55,600	447	120,000	125,000	130,000
398	30,000	33,000	35,000	448	_	_	65,490
399	64,600	70,491	71,940	449	_	_	30,513
400	34,000	161,000	151,000	450	_	_	9,880
401	1,636,094	1,717,060	1,708,528	451	_	_	45,000
402	114,156	81,499	83,972	452	54,000	58,000	80,000
403	114,100	-	410,000	453	_	-	27,720
403	319,442	349,830	348,300	454	_	73,000	70,000
404	50,506	52,661	51,835	455	75,000	91,000	125,000
406	30,300	02,001	32,300	456	_	-	45,74
407	_	_	13,832	457	68,000	_	145,000
407	70.960	96,741	71,456	458	87,074	95,000	97,500
408	72,368	90,741	11,400	400	31,014	,0,000	.,,,,,,,

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH- MENT	VALU	E OF GOODS	MADE	ESTABLISH- MENT	VALUI	E OF GOODS	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
459	_	_	\$87,637	509	_		\$55,000
460	_	\$27,415	29,445	510	_	_	25,800
461	\$80,500	88,200	86,989	511	_	_	383,900
462	-	-	18,586	512	_	_	55,000
463	55,000	40,000	30,000	513	_	_	22,000
464	_	_	25,000	514	_	_	21,100
465	63,000	51,000	50,000	515	_	_	88,034
466	85,452	80,000	90,270	516	\$146,000	\$96,000	160,000
467	79,202	83,786	105,741	517	118,345	90,122	83,610
468	-		25,000	518	37,189	30,118	18,875
469	_	_	60,000	519	-	101,542	119,000
470	_		35,000	520	_ i	74,906	60,000
471	_	_	20,561	521	_	14,500	19,000
472	_	_	23,291	522	_	_	35,840
473	_	- 1	31,500	523	-	-	60,000
474	_	165,928		524	-	_	
475	_	92,064	147,056	525			158,000
	01.000	1 1	82,703	525 526	-	-	6,000
476	81,299	85,658	87,690	1 !	-	-	15,000
477	_	-	70,156	527	-	-	23,400
478	-	-	23,000	528	-	-	8,900
479	-	-	19,212	529	-	-	10,113
480	-	-	30,000	530	-	-	70,000
481	-		16,000	531	-	-	18,254
482	-	120,000	81,000	532	-	-	16,500
483	100,000	103,155	116,190	533	-	-	127,357
484	65,398	80,535	94,455	534	-	-	13,675
485	65,000	65,000	48,725	535	-	-	160,000
486	-	-	36,000	536	-	-	28,256
487	49,024	39,585	43,668	537	-	-	141,000
488	-	-	22,970	538	-	-	63,467
489	108,856	103,186	144,685	539	-	-	91,743
490	~	-	7,200	540	-	-	100,000
491	-	-	10,000	541	-	-	49,000
492	-	- 1	10,000	542	-	-	26,500
493	-	-	30,000	543	-	-	30,000
494	147,286	143,955	165,000	544	-	-	55,802
495	~	-	9,360	545	-	-	20,000
496	-	-	48,500	546	252,450	276,500	326,876
497	49,544	-	-	547	120,000	125,000	183,895
498	151,000	140,000	145,700	548	145,297	142,057	163,233
499	-	-	57,794	549	-	425,000	400,000
500	-	-	39,000	550	228,691	224,620	209,802
501	-	200,000	260,000	551	-	-	306,735
502	-	-	8,000	552	-	-	130,000
503	80,000	91,000	90,000	553	-	350,000	325,000
504	-	-	51,500	554	_	69,666	_
505	44,245	40,044	45,645	555	354,630	373,757	_
506	66,000	37,520	37,808	556	150,000	158,400	_
507	_	_	20,500	557	_	120,000	_
508	_	_	26,300	558	_	380,000	_

Establish-	VALU	E of Goods	MADE	ESTABLISH-	VALU	E OF GOODS	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
559	_	\$673,738	_	609	_	_	\$8,000
560	\$205,000	228,988	-	610	_	-	35,000
561	_	218,530	_	611	_	_	11,060
562	250,000	-	-	612	\$45,000	\$44,000	38,000
563	-	_	\$27,000	613	_	_	20,000
564	_	-	9,482	614	_	30,000	24,100
565	-	-	18,000	615	-	-	14,016
566	-	-	18,000	616	_	-	41,250
567	-	_	125,000	617	10,000	-	14,000
568	_	-	25,116	618	27,280	-	71,220
569	-	_	204,318	619	754,200	737,478	683,640
570	-	_	12,740	620	767,195	769,009	1,011,144
571	_	-	37,446	621	1,332,050	1,328,251	1,612,817
572	_	_	150,000	622	109,258	119,044	114,800
573	_	_	33,000	623	_	243,296	248,000
574	_	_	3,000	624	116,850	151,892	174,346
575	_	_	104,865	625	783,513	734,331	691,550
576	_	_	646,251	626	57,963	35,097	_
577	_	_	14,000	627	94,500	-	-
578	_	_	9,000	628	_	-	11,133
579	_	_	87,000	629	_	_	9,284
580	259,169	168,417	139,113	630	-	_	45,591
581	_	_	14,000	631	_	_	112,978
582	_	_	25,000	632	_	-	60,000
583	_	_	188,000	633	_	_	23,100
584	3,641,486	4,397,572	5,123,000	634	_	-	56,145
585	_	2,000,000	_	635	_	_	35,000
586	175,000	190,000	_	636	_	_	154,274
587	486,730	_	_	637	_		84,200
588	_	103,622	_	638	_	_	14,112
589	_	2,000,000	1,244,170	639	_ :	_	55,000
590	_	_	23,013	640	_	_	754
591	-	_	10,000	641	_	_	13,930
592	_	_	22,200	642	_	_	14,000
593	_	_	61,813	643	_	_	1,900
594	228,453	231,032	163,406	644	_	-	24,000
595	-	21,000	27,000	645	_	_ !	13,800
596	_		25,000	646	_	_	52,984
597	_	_	21,083	647	_	-	80,363
598	75,000	108,000	100,000	. 648	_	_	215,389
599	_		24,361	649	_	_	15,000
600	_	_	28,000	650	_	_	36,734
601	82,141	71,875	112,850	651	-	-	58,000
602		-,	26,269	652	-	-	19,000
603	293,494	109,806	-	653	_	-	119,638
604			13,255	654	_	-	68,000
605		_	18,000	655	_	_	2,648
606	_	_	18,000	656	_	_	42,000
607	_	_	25,550	657	_	-	41,829
608	_	_	23,000	658	_	-	30,729
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COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH-	VALU	E of Goods	Made	ESTABLISH-	VALU	E OF GOODS	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
659	_	_	\$5,000	709	_	_	\$20,000
660	_	_	32,000	710	_	_	30,000
661	_	\$205,310	195,706	711	_	_	15,000
662	_	-	38,000	712	\$370,000	\$375,000	10,000
663	_	_	18,000	713	_	_	12,000
664	_	_	250,000	714	262,368	384,000	359,323
665	_	_	40,000	715	_	_	15,000
666	_	_	19,949	716	62,000	57,000	53,090
667	_	-	50,000	717	_	_	12,000
668	_	_	17,500	718		_	17,809
669	_	_	12,000	719	107,978	90,737	114,202
670	_	_	126,320	720		_	27,725
671	_	_	13,000	721	58,974	84,940	127,634
672	_	_	45,967	722	71,347	_	_
673	\$38,000	42,750	_	723	-	_	40,000
674		32,364	32,067	724	_	_	23,946
675	39,341	_	_	725		353,749	335,376
676	45,000	67,500	67,500	726	180,825	164,749	155,917
677	145,285	163,928	151,909	727	452,348	323,000	209,550
678	128,558	100,000	71,074	728	_	_	116,558
679	150,000		84,000	729	_	134,125	116,132
680	188,000	200,000	286,000	730	186,000	-	_
681	_	_	157,174	731	_	_	121,807
682	1,535,230	1,099,809	1,102,415	732	400,000	400,000	400,000
683	94,751	55,733	97,052	733	61,175	59,789	61,000
684	205,765	227,238	242,866	734	_	_	32,000
685	_	_	43,200	735	_	_	23,744
686	40,000	100,000	47,150	736	_	~	12,146
687	150,000	175,000	103,530	737	90,000	94,500	101,750
688	-	37,537	38,508	738	_	4,299	4,628
689	_	58,385	57,860	739	_	_	10,192
690	181,375	200,000	200,000	740	465,782	614,000	495,720
691	· _	_	169,524	741	′ _	_	60,000
692	22,950	_	27,985	742	_	_	11,000
693	114,395	137,886	146,470	743	_	_	33,500
694	95,106	76,030	78,500	744	138,000	138,000	118,000
695	148,660	133,000	200,000	745	, _ i	60,000	65,000
696	293,155	316,989	470,316	746	-	_	45,000
697	_		48,000	747	_	_	200,000
698	149,226	165,888		748	-	_	50,000
699	278,411	-	306,336	749	-	_	110,000
700	35,427	_	25,575	750	-	_	95,000
701	-	-	240,000	751	62,500	75,000	75,000
702	-	-	50,000	752	600,000	_	564,000
703	362,526	419,900	420,750	753	-	- }	100,000
704	-	-	7,400	754	-	_	30,000
705	-	_	5,450	755	_	235,000	433,500
706	58,791	58,791	57,445	756	_	-	325,000
707	-	-	18,000	757	-	_	245,168
708	56,085	56,085	56,085	758	-	_	12,000
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ESTABLISH-	VALU	je of Goods	MADE	ESTABLISH-	VALU	E OF GOODS	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
759	_	_	\$92,718	809	_	_	\$63,000
760	_	_	20,000	810	\$16,500	\$16,137	6,915
761	_	-	95,000	811	" ´-		31,200
762	_	\$90,000	100,000	812	100,000	100,000	100,000
763	_	-	8,100	813	_	21,988	18,244
764	_	-	150,524	814	250,000	260,000	310,000
765	\$162,000	170,100	181,300	815	115,000	_	_
766	_	40,000	45,000	816	33,500	32,350	27,100
767	-	-	65,000	817	-	_	530,219
768	20,000	40,000	52,000	818	-	-	66,500
769	_	_	21,875	819	-	-	12,286
770	-	345,000	600,000	820	300,000	300,000	303,000
V 771	170,000	136,000	128,128	821	1,010,000	1,250,000	1,400,000
772	50,000	36,000	46,644	822	-	-	83,951
773	-	-	59,760	823	-	-	36,900
774	_	-	30,000	824	-	-	30,000
775	-	-	29,817	825	-	-	20,250
776	250,000	-	250,000	826	-	-	275,400
777	165,712	148,705	159,678	827	589,415	868,573	780,462
778	-	-	15,000	828	76,378	80,000	87,069
7749	-	_	187,200	829	-	100,000	80,000
780	-	-	140,855	830	-	- 1	23,340
781	442,500	375,000	375,000	831	132,000	135,000	125,000
782	-	-	1,005,186	832	72,000	65,000	67,200
783	-	-	32,481	833	130,000	152,670	190,000
784	-	-	12,000	834	267,391	-	257,840
785	42,453	43,272	44,202	835	-	-	20,000
786	-	3,500	-,	836	-	-	67,000
787	36,080	31,000	40,000	837	265,000	375,000	472,000
788	89,786	64,000	61,000	838	105,000	112,500	99,900
789	65,000	65,000	61,250	839	225,000	215,626	292,500
790	-	-	26,000	840	-	300,000	260,000
791	-	- :	67,500	841	-	195,046	195,046
792	-		48,202	842	-	-	10,178
793	-	80,000	100,000	843	10,380	13,477	8,686
794	38,676	36,890	31,200	844	29,261	-	60,000
795	335,457	516,666	398,000	845	-	79,950	122,800
796	37,500	-	53,000	846	-	55,000	52,800
797	65,000	75,000	75,000	847	-	-	38,040
798	54,000	80,000	90,000	848	-	- 1	80,000
799	-	300,000	-	849	37,875	30,000	-
800	43,525	54,131	41,523	850	90,000	100,000	-
801	180,809	210,709	236,153	851	53,696	90,000	- 4
802	-	-	12,600	852	-	214,000	-
803	41,260	42,750	46,000	853	-	111,000	-
804	-	-	10,800	854	-	45,000	-
805	201,544	204,672	186,806	855	-	-	42,258
806	128,700	157,000	220,000	856	53,299	42,000	50,044
807	297,210	288,000	274,080	857	-	-	5,500
808	830,020	687,775	755,258	858	151,960	168,870	174,791

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH-	VALU	E OF GOODS	MADE	ESTABLISH-	VALU	E OF GOODS	Made
NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
859	\$60,414	\$61,365	\$55,500	909	_	_	\$14,300
860	_	-	30,625	910	-	_	15,450
861	-	_	13,400	911	-	_	5,000
862	60,000	60,000	60,000	912	\$115,959	_	90,000
863	-	-	32,000	913	_	\$60,000	60,000
864	50,000	48,000	47,000	914	-	_	20,616
865	-	-	80,000	915	-	1,500,000	1,600,000
866	127,220	161,429	146,836	916	-	-	36,740
867	-	-	29,852	917	_	-	60,000
868	-	_	53,500	918	-	-	600,000
869	-	-	48,000	919	_	-	350,000
870	-	-	22,557	920	-	_	8,400
871	-	-	25,000	921	-	-	40,000
872	-	-	15,000	922	-	-	55,000
873	-	_	12,207	923	180,756	161,357	170,654
874	-	-	39,037	924	1,300,000	1,155,072	1,025,000
875	-	-	9,900	925	89,965	90,000	125,000
876	-	_	10,000	926	-	-	38,000
877	-	-	18,571	927	1,011,000	1,124,250	1,040,098
878	_	~	18,000	928	-	-	72,290
879	-	-	42,423	929	-	-	32,000
880	-	_	13,500	930	-	-	50,000
881	_	-	22,000	931	290,000	309,000	275,000
882	-	_	144,598	932	185,971	201,504	208,160
883	-	_	. 9,900	933	25,000	30,000	31,000
884	-	_	21,000	934	-	-	10,000
885	-	_	3,600	935	650,000	650,000	650,000
886	-	-	7,000	. 936	-	-	37,600
887	-	-	14,436	937	-	-	90,000
888	-	-	16,250	938	-	-	130,000
889	-	-	10,125	939	-	-	47,047
890	-	- 1	19,050	940	-	-	24,750
891	-	-	203,564	941	-	-	55,000
892	-	-	150,000	942	-	-	24,500
893	-	-	12,630	943	75,753	75,000	50,850
894	60,000	82,500	-	944	-	-	36,000
895	2,348,564	2,260,979	2,360,248	945	-	-	300,618
896	229,205	205,753	326,270	946	-	-	24,000
897	-	-	22,707	947	-	-	22,850
898	-	-	45,562	948	-	- }	73,000
899	-	-	14,699	949	-	-	15,000
900	78,000	-	34,000	950	-	-	168,000
901	1,225,000	1,300,705	1,339,634	951	-	- 1	174,155
902.	-	-	35,000	952	-	205,000	210,000
903	-	1,463,100	1,675,756	953	-	-	315,000
904	661,760	639,009	726,608	954	-	-	179,168
905	- ,	-	25,000	955	-	-	86,700
906	-	376,423	-	956	-	-	50,100
907	-	-	82,000	957	- !	-	12,800
908	_	_	44,400	958		_	8,000

ESTABLISH-	VALUE	or Goods	Made	ESTABLISH-	VALUE	or Goods	MADE
NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
959	-	-	\$7,000	1,009	-	_	\$53,158
960	-	-	39,000	1,010	-	-	80,000
961	-	_	39,841	1,011	-	-	8,000
962	-	-	240,000	1,012	-		28,000
963	_	_	43,296	1,013	\$850,000	~	
964	-	-	35,000	1,014	-	-	18,600
965	\$136,012	\$185,406	. 194,735	1,015	-	-	24,800
966	1,812,675	1,590,000	1,516,000	1,016	-	~	40,000
967	83,200	78,500	98,041	1,017	-	\$60,000	60,000
968	57,825	53,837	52,351	1,018	64,581	-	-
969	387,650	397,400	391,800	1,019	_	-	11,438
970	121,111	129,894	132,789	1,020	<u> </u>	-	3,500
971	187,187	205,000	250,000	1,021	-	-	20,930
972	330,000	350,000	386,319	1,022	-	-	13,221
973	2,113,000	2,259,424	2,657,000	1,023	-	-	3,642
974	223,888	219,628	231,834	1,024	-	-	12,663
975	79,911	73,744	86,626	1,025	-	_	16,000
976	102,000	99,200	103,000	1,026	50,405	49,750	55,675
977	812,554	902,310	912,108	1,027	-	-	13,517
978	386,200	417,739	431,436	1,028	-	-	141,010
979	862,819	862,900	879,221	1,029	_	-	370,250
980	596,692	636,416	600,555	1,030	-	-	28,392
981	811,377	912,832	909,193	1,031	_	-	11,968
982	_	491,396	525,962	1,032	-	-	8,544
983	_	1,017,911	1,154,842	1,033	-	_	90,782
984	630,893	715,834	663,733	1,034	_	-	9,500
985	279,546	313,745	302,525	1,035	-	-	30,000
986	321,146	316,151	391,693	1,036	-	-	21,674
987	428,731	531,853	512,723	1,037	-	-	2,147
988	_	274,345	302,423	1,038	288,116	-	290,895
989	480,667	521,398	522,964	1,039	_	- 1	92,568
990	1,238,126	1,228,424	1,419,467	1,040	_	_	39,558
991	_	6,560	13,414	1,041	_	_	161,680
992	220,356	160,042	210,000	1,042	_]	-	59,251
993	56,250	51,750	41,041	1,043	_ 1	_	111,665
994	78,000	129,000	92,500	1,044	_	210,000	119,500
995	_	_	301,088	1,045	_ [26,000	25,985
996	_	320,000	, , , , , , , , , , , , , , , , , , ,	1,046	_	_	30,000
997	131,867		_	1,047	_	72,511	-
998	_	371,000	_	1,048	-	-	29,043
999	125,000	100,000	_	1,049	- 1	_	26,819
1,000	_	500,000	_	1,050	_	-	45,000
1,001	110,000	-	_	1,051	_	-	32,925
1,002	200,000	_	_	1,052	-	_	18,000
1,003	_	104,401	_	1,053	_	_	80,000
1,004	204,869	245,945	_	1,054	-	-	16,490
1,005	_	_	8,241	1,055	_	-	20,200
1,006	_	_	33,554	1,056	_	_	115,000
1,007	_	_	24,000	1,057	163,663	104,500	224,000
1,008	_	-	3,000,000	1,058	-	-	3,000

ESTABLISH-	VALUE	or Goods	MADE	ESTABLISH-	VALU	MADE	
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
1,059	-	_	\$30,266	1,109	_	_	\$30,000
1,060	\$122,700	_	251,000	1,110	_	_	70,000
1,061	-	_	33,000	1,111	_	_	9,700
1,062	56,000	\$61,000	30,000	1,112	_	_	20,000
1,063	_	220,000	256,689	1,113	_	_	175,000
1,064	-	_	33,000	1,114	_	_	9,000
1,065	364,770	371,295	371,465	1,115	_	_	5,000
1,066	_		18,311	1,116	\$151,018	\$135,000	135,000
1,067	114,240	120,000	118,000	1,117	_	88,009	69,009
1,068	400,000	· -	475,000	1,118	119,221	100,000	_
1,069		_	11,800	1,119	_		7,500
1,070	250,000	250,000	56,480	1,120	_	83,000	82,185
1,071	63,825	,	_	1,121	80,709	101,943	81,483
1,072	55,324	54,680	61,358	1,122	135,000	155,000	195,000
1,073	-	-,	39,000	1,123		100,000	11,160
1,074	-	_	10,000	1,124	121,643	59,540	110,000
1,075	_	_	15,575	1,125	15,315	-	15,750
1,076	_	_	16,700	1,126	108,852	102,856	95,179
1,077	_	_	48,000	1,127		102,000	11,100
1,078	_	~	20,000	1,128	_	_	31,500
1,079	_	-	290,000	1,129	48,780	43,000	-
1,080	_	_	5,700,000	1,130	10,100	26,671	_
1,081	86,000	86,000	86,000	1,131		20,011	696,847
1,082		- 00,000	8,229	1,132	268,802	354,887	348,000
1,083	_	_	57,024	1,133	9,180	-	-
1,084	_	_	69,602	1,134	2,100	_	3,727
1,085	_	_	21,502	1,135		<u> </u>	21,000
1,086	_	_	28,798	1,136	310,000	200,000	21,000
1,087	_	_	32,191	1,137	-		36,500
1,088	515,404	604,350	370,000	1,138	_	25,000	42,449
1,089	40,000	40,000	40,000	1,139	250,000	113,973	111,376
1,090	_	-	45,000	1,140	2,070,959	1,656,505	1,288,854
1,091	_	_	8,028	1,141	340,000	430,384	250,000
1,092	_	_	42,000	1,142	184,835	118,032	122,063
1,093	_	50,000	_	1,143	55,923	147,286	199,443
1,094	24,499	24,818	_	1,144	-		39,200
1,095	70,000	65,000	55,000	1,145	65,700	56,450	75,000
1,096	125,000	150,000	175,000	1,146	-	94,210	100,000
. 1,097	100,000	110,000	110,000	1,147	9,000	-	7,500
1,098	19,500	26,500	50,000	1,148	264,900	305,000	301,610
1,099	49,991	54,576	75,293	1,149		_	38,000
1,100	50,000	40,000	28,551	1,150	_	_	36,542
1,101	63,096	128,446	110,000	1,151	_	_	16,425
1,102	_	_	10,000	1,152	34,732	43,213	41,667
1,103	57,000	57,000	57,000	1,153	- 1,102		9,905
1,104	25,000	15,000	20,000	1,154	_		4,000
1,105	_		40,000	1,155	_	_	5,900
1,106	_	_	21,000	1,156	_	_	3,000
1,107	63,225	80,500	75,000	1,157	_	_	4,000
1,108	_		15,000	1,158	_	_	20,000
				-,			

ESTABLISH-	VALUE	of Goods	Made	ESTABLISH-	VALUE	e of Goods	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888 .	1889
1,159	\$22,137	\$22,500	\$34,000	1,209	_	-	\$21,958
1,160	-	-	22,000	1,210	\$144,344	\$156,363	153,000
1,161	-	-	28,514	1,211	-	_	54,18
1,162	_	-	29,000	1,212	_	_	9,148
1,163	-	-	6,900	1,213	-	21,900	19,300
1,164	-	20,500	6,000	1,214	-	-	16,51
1,165	-	24,000	6,000	1,215	735,815	-	750,10
1,166	-	75,732	71,588	1,216	-	-	1,798,68
1,167	-	32,000	26,000	1,217	170,140	189,757	210,00
1,168	-	40,000	-	1,218	71,178	85,661	72,72
1,169	248,820	204,360	170,000	1,219	81,471	79,222	65,27
1,170	93,341	93,341	95,000	1,220	45,085	37,614	95,03
1,171	199,383	210,379	195,932	1,221			29,50
1,172	_	98,462	35,955	1,222	71,892	71,298	102,04
1,173	75,000	90,000	80,000	1,223	_	40,000	40,00
1,174		_	29,570	1,224	_	_	30,00
1,175	11,079	_	11,492	1,225	43,790	52,359	63,20
1,176		90,000	100,000	1,226	10,100	97,037	95,99
1,177	_		80,350	1,227	107,286	106,394	107,65
1,178	_ [393,382	1,228		100,004	28,00
1,179			355,500	1,229		_	14,96
1,180	-	-	13,000	1,230	530,000	664,000	860,00
1,181	54,000	_	19,000	1,230	350,000	004,000	2,15
1,182	54,000	- 1	365,251	1,232	120.156	140,000	88,76
1,183	_	-	1,075,000	1,283	130 ,1 56 86 , 298	92,250	
1,184	-	•	25,000	1,234	74,500	92,200	85,50
1,185	_	-	61,750			_	
1,186	-	-	1,750	1,235	147,375	-	
1,187	-	2 600	1,750	1,236	92,586	107.076	
,	-	3,600	60,000	1,237	386,303	431,216	
1,188	-	-	60,000	1,238	-	81,664	
1,189	-	-	131,509	1,239		114,600	700.05
1,190	-	-	3,050	1,240	131,012	130,893	133,27
1,191	-	-	44,200	1,241	-	-	22,00
1,192	-	-	20,900	1,242	-	~	187,13
1,193	-	-	523,408	1,243		-	18,00
1,194	-	-	7,000	1,244	51,834	62,320	75,07
1,195	-	-	95,468	1,245	-		44,96
1,196	-	-	12,000	1,246	90,191	87,400	83,24
1,197	-	-	50,000	1,247	104,191	118,069	113,33
1,198	-	- 1	27,500	1,248	-	- 1	130,00
1,199	-	~	131,000	1,249	-	-	34,93
1,200	-	-	104,000	1,250	-	-	8,40
1,201	-	-	340,086	1,251	-	-	27,50
1,202	-	-	59,400	1,252	73,516	70,783	92,59
1,203	-	-	47,500	1,253	-	290,000	320,00
1,204	-	-	26,480	1,254	-	-	10,59
1,205	36,700	23,500	14,730	1,255	130,000	120,000	112,00
1,206	-	-	5,805	1,256	67,504	62,894	63,47
1,207	71,001	73,496	110,316	1,257	39,872	33,703	55,86
1,208	62,936	-	179,904	1,258	123,641	155,180	148,68

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Continued.

ESTABLISH-	VALUE	or Goods	MADE	ESTABLISH-	VALUI	e of Goods	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
1,259	\$131,816	\$147,773	\$168,048	1,309	\$65,000	\$74,721	\$85,858
1,260	-	_	4,000	1,310	_	_	41,750
1,261	80,698	74,425	70,056	1,311	102,000	105,524	73,239
1,262	-	_	22,500	1,312	_	120,198	108,596
1,263	-	_	96,148	1,313	_	_	37,199
1,264	163,211	200,843	225,000	1,314	_	_	3,200
1,265	310,000	296,000	233,850	1,315	_	_	50,000
1,266	_	_	32,386	1,316	_ 1		16,685
1,267	144,066	182,273	170,000	1,317	121,939	104,600	_
1,268	_	_	61,560	1,318	183,516	195,141	197,757
1,269	_	_	24,680	1,319	_	222,268	305,000
1,270	- 1	_	19,709	1,320	_	440,000	481,889
1,271	-	_	14,758	1,321	390,000	436,282	310,727
1,272	_	_	15,000	1,322	436,940	463,680	476,700
1,273	-	_ :	41,500	1,323	312,029	372,595	363,206
1,274	_	_	27,240	1,324	190,000	191,500	200,528
1,275	156,041	76,529	21,210	1,325	100,000	298,946	317,000
1,276	82,655	87,500	91,014	1,326	231,600	200,010	-
1,277	02,000	- 01,000	86,000	1,327	115,225	120,499	115,771
1,278	_		45,000	1,328	110,220	120,100	120,481
1,279	-	_	29,952	1,329	174,065	289,151	375,805
1,280	127,750	102,250	186,750	1,329	174,358	150,000	152,500
1,281	121,100	370,000	322,513		174,595	100,000	121,200
-	-	570,000	50,000	1,331	_	400,000	600,000
1,282 1,283	~		35,000	1,332	_	400,000	8,500
	-	_	,	1,333	700,000	192,140	179,749
1,284	_		37,500	1,334	198,923	304,560	334,800
1,285		-	14,300	1,335		341,583	,
1,286	-	-	40,000 16,500	1,336	244,374	49,200	513,941 46,113
1,287	FC 005	-0.000		1,337	36,750		
1,288	76,885	79,369	90,800	1,338	256,747	246,530	258,755
1,289	-	707.404	135,000	1,339	-	46,536	57,109
1,290		131,424	148,627	1,340	_	-	12,000
1,291	37,800	16,456	15,985	1,341		147.000	94,000
1,292	20.000	75,000	-	1,342	74,825	167,089	156,685
1,293	60,000	_	-	1,343	-	101,492	139,080
1,294	140,000	-	_	1,344	-	-	16,400
1,295	-	57,258	-	1,345	-	_	50,753
1,296	100,000		_	1,346	-	-	86,640
1,297	46,977	74,346	-	1,347	_	_	24,419
1,298	_	6,162,644	-	1,348	-	-	35,000
1,299	178,000	178,000	-	1,349	-	-	29,180
1,300	395,797	-	-	1,350		-	11,000
1,301	15,200	-		1,351	96,011	156,745	166,356
1,302	24,200	-	45,000	1,352	_	-	86,814
1,303	43,864	58,477	77,982	1,353	-	-	468,592
1,304	-	-	20,735	1,354	-	-	465,544
1,305	64,967	57,358	62,000	1,355	-	-	1,004,635
1,306	98,898	90,564	99,721	1,356	-	-	674,914
1,307	88,927	99,260	120,035	1,357	-	-	210,448
1,308	_	46,860	47,537	1,358		_	3,500

COMPARATIVE PRODUCT: BY ESTABLISHMENTS—Continued.

ESTABLISH-	VALUE	of Goods	MADE	ESTABLISH-	VALUE OF GOODS MADE			
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889	
1,359	_	_ [\$17,500	1,409	_	_	\$4,10	
1,360	-		15,127	1,410	_	_	22,61	
1,361	-	\$50,000	64,000	1,411	\$132,579	\$127,696	133,S	
1,362	_	_	42,700	1,412		516,099	521,99	
1,363 .	\$60,000	78,000	67,200	1,413	_	- 1	4,1	
1,364	_	-	14,440	1,414	154,224	137,390	168,88	
1,365	_	_	8,000	1,415	480,000	482,918	571,9	
1,366	_	_	6,400	1,416	400,000	102,010	69,1:	
1,367	_	_	69,144	1,417			16,0	
1,368		_	21,480	1,418	250,000	280,000	300,0	
1,369	-	-	9,341	1,419	230,000	280,000		
1,370	- 1		37,000	1,419	-	-	21,2	
1,371	-		30,000		_ [_	35,0	
1,372			14,000	1,421	-	-	24,5	
1,373	-	-		1,422		-	10,7	
	100.000	-	9,200	1,423	78,276	104,000	144,4	
1,374	190,000	380,000	380,000	1,424	-	63,000	65,0	
1,375	-	28,000	52,500	1,425	-	-	17,5	
1,376	-	-	13,000	1,426	-	-	13,7	
1,377	-	-	35,000	1,427	- 1	-	8,5	
1,378	-	-	25,000	1,428	_	-	85,2	
1,379	-	-	13,400	1,429	-	-	122,2	
1,380	-	-	10,267	1,430	-	-	7,0	
1,381	35,000	51,432	60,000	1,431	-	-	30,0	
1,382	-	-	20,911	1,432	-	-	71,1	
1,383	-	-	93,785	1,433	-	-	13,8	
1,384	-	60,000	60,000	1,434	-	-	14,0	
1,385	200,000	150,000	125,000	1,435	-	-	115,0	
1,386	74,000	90,000	125,000	1,436	-	-	24,8	
1,387	-	-	9,000	1,437	-	-	75,0	
1,388	-	-	200,000	1,438	114,101	114,007	114,0	
1,389	-	-	17,000	1,439	34,600	45,880	50,0	
1,390	-	-	12,000	1,440	75,000	70,000	80,0	
1,391	-	-	15,000	1,441	-	-	7,8	
1,392	-	-	150,000	1,442	55,600	-	71,9	
1,393	-	-	8,000	1,443	-	-	19,5	
1,394	-	-	5,000	1,444	-	20,950	32,0	
1,395	-	-	20,000	. 1,445	-	-	16,8	
1,396	35,998	45,641	54,227	1,446	-	-	42,4	
1,397	- 1	-	13,390	1,447	-	-	27,0	
1,398	-	- {	14,000	1,448	-	-	50,0	
1,399	-	_	9,000	1,449	-	-	31,00	
1,400	-	170,333	-	1,450	-	-	5,70	
1,401	-	-	27,000	1,451	_	-	26,3	
1,402	-	_	6,720	1,452	_	_	6,10	
1,403	-	-	32,055	1,453	145,000	42,350	51,0	
1,404	-	_	35,924	1,454	_	-	9,0	
1,405	-	_	25,240	1,455	203,009	199,285	144,1	
1,406	_	_	14,000	1,456	67,000	67,000	64,5	
1,407	67,008	81,100	98,825	1,457	_	-	2,5	
,	66,902	70,690	72,230	1,458			- 5	

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH- MENT	VALUE	or Goods I	IADE	ESTABLISH- MENT	VALUE	or Goods	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
1,459	_	_	\$36,000	1,509	_	\$162,000	\$165,000
1,460	-	-	20,000	1,510	\$175,275	175,276	60,000
1,461	_	_	20,000	1,511	-	-	140,000
1,462	\$715,000	\$697,000	633,000	1,512	-	_	9,000
1,463	- 1	_	11,500	1,513	-	_	22,500
1,464	96,832	99,203	92,554	1,514	-	- 1	28,814
1,465	_	-	4,650	1,515	-	-	51,250
1,466	58,500	54,000	56,727	1,516	115,923	-	130,000
1,467	-	-	8,900	1,517	-	-	7,500
1,468	195,518	259,232	293,457	1,518	-	-]	135,000
1,469	-	167,000	229,400	1,519	-	-	3,144
1,470	-	-	8,760	1,520	294,918	197,466	92,160
1,471	-	_	12,000	1,521	-	27,500	23,795
1,472	-	_	28,800	1,522	-	-	33,670
1,473	-	-	2,250	1,523	-	191,800	170,000
1,474	8,000	9,350	10,400	1,524		-	100,000
1,475	-	248,445	294,385	1,525	500,000	475,000	475,000
1,476	35,000	27,000		1,526	110,000	111,388	90,936
1,477	-	_	25,000	1,527	400,000	250,000	220,000
1,478	_	_	63,523	1,528	50,100	42,850	40,000
1,479	42,000	75,000	54,000	1,529	_	-	12,450
1,480		1,570	_	1,530	1,062,000	1,050,000	745,000
1,481	_	_	9,398	1,531		_	100,000
1,482	_	13,300	9,750	1,532	_	-	108,000
1,483	_		14,400	1,533	_	-	12,444
1,484	- 1	_	45,485	1,534	_	50,000	50,647
1,485	_	-	12,500	1,535	-	52,800	60,000
1,486	300,000	207,000	325,000	1,536	83,590	78,261	55,609
1,487		-	118,000	1,587	516,929	597,034	548,366
1,488	- 1	-	12,000	1,538	-	-	51,400
1,489	192,589	176,000	306,000	1,539	-	_	178,000
1,490	-	_	29,400	1,540	-	-	66,825
1,491	56,857	50,223	42,607	1,541	57,808	62,000	52,956
1,492	_	4,400	_	1,542	52,119	57,138	63,295
1,493	-	228,003	259,268	1,543	-	-	30,553
1,494	126,000	107,200	107,200	1,544	170,000	200,000	-
1,495	-	_	3,750	1,545	100,000	115,000	162,448
1,496	_	71,584	100,300	1,546	120,000	125,000	133,000
1,497	-	-	5,000	1,547	-	-	380
1,498	-		15,186	1,548	55,540	46,720	125,350
1,499	-		30,488	1,549	-	17,900	30,000
1,500	200,000	184,158	287,500	1,550	-	-	13,621
1,501	_	100,800	103,000	1,551	57,183	74,882	77,166
1,502	-	-	250,000	1,552	60,000	57,600	33,000
1,503	-	50,000	100,000	1,553	252,000	-	289,155
1,504	65,741	68,866	57,390	1,554	-	-	74,508
1,505	108,247	-	103,635	1,555	236,000	236,000	236,000
1,506	280,257	225,000	171,800	1,556	350,000	375,000	375,000
1,507	-	-	25,000	1,557	68,600	48,525	-
1,508	-	-	400,000	1,558	-	100,000	132,000

${\tt COMPARATIVE\ PRODUCT:\ BY\ ESTABLISHMENTS-Continued}.$

ESTABLISH- MENT	VALU	e of Goods	MADE	ESTABLISH- MENT	VALUI	e of Goods	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
1,559	\$50,000	\$44,000	\$39,000	1,609	_	_	\$23,000
1,560	_	_	40,000	1,610	-	_	38,979
1,561	-	-	9,520	1,611	-	_	30,000
1,562	-	-	47,225	1,612	_	_	3,569
1,563	-	-	14,000	1,613	-	-	42,500
1,564	-	104,152	218,926	1,614	_		23,000
1,565	45,000	69,900	30,000	1,615	\$91,074	\$91,074	92,875
1,566	_	_	64,676	1,616	_	_	3,600
1,567	238,260	255,505	255,000	1,617	50,000	_	
1,568	100,000	88,014	96,503	1,618	80,000	_	_
1,569	200,000	210,090	178,000	1,619		_	30,000
1,570	278,359	286,403	341,330	1,620	-	_	192,000
1,571	_	_	20,000	1,621	_	100,000	76,566
1,572	50,260	54,000	47,400	1,622	_	_	20,000
1,573	_	_	36,000	1,623	-	_	13,375
1,574	275,000	280,000	270,000	1,624	-	_	33,000
1,575	330,000	350,000	288,000	1,625	_	_	7,000
1,576	_		12,130	1,626	-	-	10,000
1,577		_	33,500	1,627	_	85,000	85,000
1,578	_	18,000	-	1,628	-	´ _	17,000
1,579	_	323,738	_	1,629	_	-	25,000
1,580	_	106,000	_	1,630	_	75,000	68,000
1,581	129,600	_	-	1,631	60,000	58,500	57,670
1,582	37,500	_	_	1,632	-	_	16,710
1,583	_	75,000	_	1,633	_	_	25,000
1,584	_	125,000	_	1,634		_	33,780
1,585	144,000		-	1,635	-	_	17,700
1,586	55,000	55,000	_	1,636	_	_	30,000
1,587	281,062	_	_	1,637	_	_	15,842
1,588	15,789	_	_	1,638	_	50,000	61,920
1,589	207,228	176,145	_	1,639	78,631	71,000	81,800
1,590	89,993	53,313	_	1,640		´ -	12,800
1,591	900,000	· -	_	1,641	45,000	45,000	60,000
1,592	160,860	_	_	1,642	- 1	_	40,000
1,593	_	30,000	_	1,643	-	_	39,000
1,594	345,525	392,441	_	1,644	_	_	11,700
1,595	_	500,000	750,000	1,645	28,300	29,150	32,000
1,596	12,500	_	9,600	1,646	-	-	19,325
1,597	_	_	50,000	1,647	259,473	_	239,000
1,598	10,470	_	6,203	1,648	-	_	9,174
1,599	_	_	20,800	1,649	40,000	27,500	20,000
1,600	22,750	9,000	11,000	1,650	-	_	12,800
1,601	-	-	33,800	1,651	_	_	16,000
1,602	_	-	11,940	1,652		-	100,000
1,603	-	_	16,750	1,653	400,000	_	_
1,604	35,000	24,000	40,000	1,654	-	-	119,915
1,605	_	-	7,201	1,655	_	_	15,000
1,606	_	-	30,000	1,656	389,789	324,545	359,983
1,607	40,368	42,129	37,814	1,657	117,206	133,121	130,973
1,608	51,910	55,321	52,802	1,658	-	_	10,000

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Continued.

ESTABLISH- MENT	VALU	e of Goods	Made	ESTABLISH-	VALU	E of Goods	MADE
NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
1,659	\$61,000	_	\$23,900	1,709	_	_	\$14,001
1,660	-	_	150,000	1,710	\$28,010	\$31,161	22,375
1,661	-	-	175,000	1,711	48,197	39,313	36,598
1,662	105,000	\$65,000	9,100	1,712	-	_	53,680
1,663	348,523	385,085	383,582	1,713	517,934	524,293	470,560
1,664	267,600	245,400	248,730	1,714	1,578,724	1,717,422	1,842,764
1,665	-	-	7,500	1,715	519,000	739,000	894,600
1,666	450,000	462,000	505,000	1,716	71,621	28,914	27,281
1,667	-	-	44,121	1,717	170,000	178,800	142,383
1,668	51,259	-	-	1,718	285,378	365,000	158,607
1,669	-	_	570,000	1,719	173,000	286,937	325,990
1,670	600,000	579,000	550,000	1,720	210,030	214,580	292,445
1,671	_	-	23,400	1,721	137,430	135,795	148,000
1,672	84,000	90,000	85,000	1,722	_	-	156,600
1,673	-	-	16,000	1,723	52,411	51,538	57,750
1,674	110,000	125,000	120,000	- 1,724	_	-	30,240
1,675	_	_	27,000	1,725	191,168	182,615	181,000
1,676	-	_	51,000	1,726	163,000	151,000	94,414
1,677	750,000	750,000	593,500	1,727	111,005	124,500	129,500
1,678	-	-	18,777	1,728	174,511	180,849	182,106
1,679	276,930	-	593,650	1,729	159,131	164,660	178,181
1,680	-	-	72,262	1,730	-	-	45,360
1,681	-	-	25,000	1,731	169,281	168,900	179,114
1,682	-	-	15,500	1,732	338,799	382,677	388,311
1,683	-	-	47,000	1,733	123,514	137,709	133,566
1,684	292,161	281,576	309,000	1,734	812,805	848,145	794,190
1,685	292,500	375,000	260,000	1,735	41,328	34,252	36,049
1,686	_	_	24,000	1,736	202,600	133,000	159,980
1,687		-	80,640	1,737	249,780	378,336	378,336
1,688	769,085	682,792	920,787	1,738	158,000	134,450	167,290
1,689	55,000	56,000	55,000	1,739	406,000	395,000	411,000
1,690	-	-	18,160	1,740	1,126,526	1,187,172	1,134,973
1,691	- 1	-	20,089	1,741	567,769	555,031	552,417
1,692	-	-	410,000	1,742	28,600	31,300	33,500
1,693	-	-	42,194	1,743	-	12,980	26,136
1,694	133,817	158,626	149,107	1,744	62,250	105,000	36,737
1,695	-	_	47,000	1,745	210,000	240,000	473,000
1,696	245,550	283,500	258,860	1,746	763,843	840,211	846,626
1,697	-	-	89,250	1,747	-	-	266,055
1,698	- 1	-	7,397	1,748	233,614	226,374	189,081
1,699	-	-	110,500	1,749	1,037,610	1,000,000	1,102,840
1,700	1,286,083	1,482,138	2,143,541	1,750	1,026,200	977,000	1,011,700
1,701	1,028,500	1,402,000	1,368,806	1,751	240,000	199,335	236,310
1,702	174,000	171,457	156,671	1,752	-	-	192,638
1,703	-	-	42,000	1,753	175,560	193,006	229,771
1,704	840,000	1,300,000	1,266,666	1,754	20,493	23,734	-
1,705	120,500	128,000	135,680	1,755	81,835	116,566	0 155 570
1,706	432,355	860,676	1,600,000	1,756	- (-	3,455,510
1,707	82,511	107,700	143,413	1,757	-	-	13,436
1,708	_	200,216	497,561	1,758	17,344	88,990	-

ESTABLISH-	VALUE	E OF GOODS	Made	ESTABLISH- MENT	VALUE	E OF GOODS	MADE
MENT NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
1,759	\$19,000	-	_	1,809	\$160,558	\$162,536	\$200,000
1,760	-	-	\$11,517	1,810	-	15,914	8,815
1,761	-	-	59,673	1,811	-	_	22,000
1,762	-	-	810,000	1,812	-	807,000	900,000
1,763	-	-	15,300	1,813	617,622	634,262	769,700
1,764	-	-	30,000	1,814	31,830	32,416	34,231
1,765	76,523	\$99,139	75,000	1,815	259,952	219,032	268,187
1,766	45,500	45,000	56,730	1,816	702,938	647,531	959,895
1,767	64,182	60,500	41,200	1,817	50,914	100,288	205,100
1,768	-	-	35,000	1,818	453,000	484,762	452,000
1,769	-	-	75,000	1,819	290,000	331,456	331,888
1,770	-		7,800	1,820	274,000	238,000	240,732
1,771	-	-	25,522	1,821	-	78,242	83,378
1,772	-	-	20,000	1,822	640,894	1,151,179	1,277,815
1,773	130,000	138,915	160,000	1,823	-	306,070	300,060
1,774	238,000	238,000	275,000	1,824	279,000	304,350	271,110
1,775	437,898	438,128	471,103	1,825	-	18,900	-
1,776	-	102,910	100,400	1,826	300,000	281,000	-
1,777	-	-	48,600	1,827	58,500	45,000	_
1,778	25,000	-	60,000	1,828	107,742	115,695	119,174
1,779	-	-	53,121	1,829	-	440,000	448,000
1,780	-	-	30,000	1,830	-	176,297	226,799
1,781	-	-	75,000	1,831	297,331	253,223	229,263
1,782	-	-	28,000	1,832	- 1	66,425	46,150
1,783	-	-	60,000	1,833		292,400	297,400
1,784	-	-	20,000	1,834	404,000	380,000	360,000
1,785	-	30,095	20,915	1,835	95,250	105,745	97,053
1,786	198,000	268,817	292,000	1,836	50,000	48,000	40,000
1,787	-	-	250,000	1,837	173,311	191,079	170,786
1,788	36,000	35,000	26,000	1,838	151,200	150,000	150,000
1,789	-	196,435	215,872	1,839	-	121,000	105,860
1,790	197,457	258,677	235,897	1,840	-	71,000	80,000
1,791	286,530	282,630	231,437	1,841	-	183,340	250,000
1,792	72,000	71,750	62,400	1,842	-	150,880	176,000
1,793	176,624	202,030	202,089	1,843	410,000	534,867	608,625
1,794	175,190	172,524	155,272	1,844	-	43,750	25,403
1,795	285,000	297,250	325,000	1,845	-	360,000	265,711
1,796	103,736	203,021	251,944	1,846	262,440	252,000	400,000
1,797	-	-	149,970	1,847	592,315	520,953	798,388
1,798	-	20,000	14,000	1,848	250,000	387,000	472,500
1,799	-	-	19,800	1,849	95,000	81,000	59,751
1,800	-	550,,000	610,000	1,850	129,094	108,690	101,248
1,801	-	85,000	80,000	1,851	95,500	90,000	110,000
1,802	175,000	175,000	150,000	1,852	350,000	396,093	396,005
1,803	-	176,752	207,000	1,853	-	50,456	107,247
1,804	131,960	141,000	125,000	1,854	235,708	276,117	316,315
1,805	291,065	268,253	205,451	1,855	398,788	360,775	444,590
1,806	-	-	110,000	1,856	-	247,540	240,649
1,807	-	-	12,500	1,857	131,724	140,396	138,817
1,808	153,791	154,344	142,387	1,858	208,112	298,730	289,215

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Continued.

ESTABLISH- MENT	VALU	E OF GOODS	MADE	ESTABLISH- MENT	VALU	E OF GOOD	S MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
1,859	_	_	\$112,000	1,909	_	_	\$21,866
1,860	_	_	31,600	1,910	_	_	5,850
1,861	\$151,287	\$184,633	203,523	1,911	-		24,750
1,862	155,520	156,520	156,520	1,912	_	-	22,400
1,863	536,444	477,454	450,000	1,913	-	-	7,500
1,864	30,000	46,000	34,000	1,914	-	-	22,750
1,865	-	240,000	238,000	1,915	_	-	12,000
1,866	-	340,404	264,350	1,916	-	-	27,500
1,867	109,000	150,000	193,529	1,917	_	-	30,958
1,868	80,000	75,250	50,060	1,918	_	-	119,000
1,869	180,000	160,000	168,997	1,919	_	_	25,600
1,870	_	-	68,800	1,920	-	_	162,000
1,871	-	_	15,000	1,921	_	_	7,580
1,872	-	_	12,850	1,922	_	_	22,160
1,873	235,759	235,288	260,209	1,923	-	_	11,900
1,874	600,615	· - i	674,591	1,924	_	_	20,700
1,875	-	_	297,360	1,925	_	_	24,483
1,876	92,000	_	_	1,926	_	_	26,000
1,877	_	-	9,600	1,927	_	-	15,000
1,878	_	_	17,500	1,928	_	_	84,000
1,879	_	_	50,000	1,929	_	\$176,000	97,024
1,880	_	_	80,000	1,930	_	_	4,000
1,881	75,000	_	84,000	1,931	_	_	7,472
1,882	_	77,000	117,440	1,932		_	279,870
1,883	_	_	26,000	1,933	_	_	24,839
1,884	_	_	60,000	1,934	\$51,138	54,498	56,004
1,885	75,000	75,000	65,000	1,935	21,560	_	23,000
1,886	_	_	23,200	1,936	,	_	70,000
1,887	_	_	5,000	1,937	119,800	127,200	114,000
1,888	175,564	177,000	175,000	1,938	10,000	_	15,000
1,889		_	50,000	1,939	,	_	12,000
1,890	_	91,824	68,000	1,940	_	_	15,000
1,891	_	75,000	66,000	1,941	17,461	11,259	10,783
1,892	_	_	30,000	1,942	_	_	100,000
1,893	-	_	29,191	1,943	_	_	18,600
1,894		_	3,629	1,944	_	_	37,000
1,895	79,100	92,165	103,500	1,945	_	_	20,000
1,896	_	-	9,000	1,946	47,917	_	53,159
1,897	_	_	19,273	1,947		_	50,000
1,898	_ [_	23,500	1,948	_	66,100	_
1,899	_	_	8,248	1,949	_	64,000	75,000
1,900	_	-	15,008	1,950	_	80,000	_
1,901	_	_	33,302	1,951	_	_	55,775
1,902	_	_	29,681	1,952	14,375	_	
1,903	_	_	10,000	1,953	336,775	416,608	
1,904	_	_	9,000	1,954	241,214	256,047	146,622
1,905	_	_ }	9,750	1,955			37,268
1,906	_	_	65,000	1,956	108,000	105,000	113,102
1,907	_	_	56,890	1,957		_	19,600
1,908	_	_	9,000	1,958	106,708	114,434	106,298
-,000		_	.,,000	1,500	100,100	****	200,200

ESTABLISH-	VALUE	E OF GOODS	Made	ESTABLISH-	VALU	E OF GOODS	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
1,959	\$120,000	_	\$119,226	2,009	\$18,000	_	_
1,960	-	-	53,319	2,010	1,184,033	\$1,114,505	\$724,301
1,961	-	-	5,150	2,011	_	_	16,250
1,962	-	-	10,384	2,012	_	_	24,844
1,963	167,233	\$183,626	150,366	2,013	195,220	195,220	195,220
1,964	180,000	225,000	180,000	2,014	56,980	49,130	54,534
1,965	121,000	106,647	83,000	2,015	138,097	135,088	99,885
1,966	-	-	1,500	2,016	-	-	16,727
1,967	302,714	274,723	261,512	2,017	160,500	260,000	548,000
1,968	632,767	560,976	589,636	2,018	90,000	90,000	90,000
1,969	-		75,000	2,019	-	_	48,800
1,970	-	-	29,250	2,020	2,588,900	2,814,407	2,599,105
1,971	233,422	239,413	251,305	2,021	443,834	443,834	371,785
1,972	150,000	113,475	137,123	2,022	_	-	72,351
1,973	_	-	7,997	2,023	-	_	27,422
1,974	37,000		35,000	2,024	-	_	15,000
1,975	-	-	35,466	2,025	_	-	50,000
1,976	204,195	163,435	156,488	2,026	_	_	4,205
1,977	-	_	10,000	2,027	_	-	1,872
1,978	_	160,000	160,000	2,028	_	_	13,710
1,979	_	-	13,500	2,029	_	_	3,000
1,980	_	-	25,500	2,030	_	-	115,520
1,981	-	_	43,000	2,031	_	_	54,000
1,982	_	131,221	150,719	2,032	107,874	147,455	_
1,983	_	-	15,600	2,033	129,084	162,082	_
1,984	360,000	400,000	_	2,034	1,010,000	1,200,000	1,196,147
1,985	25,720	_	_	2,035	-	-	24,460
1,986	551,000	_	_	2,036	113,000	136,000	142,200
1,987	475,000	-	-	2,037	86,771	98,539	55,130
1,988	126,988	_	-	2,038	_	- !	33,000
1,989	-	-	9,124	2,039	-	~	11,500
1,990	-	_	30,967	2,040	-	_	30,800
1,991	_	-	13,000	2,041	157,976	151,033	145,000
1,992	_	-	12,000	2,042	900,000	900,000	1,100,000
1,993	9,480	-	21,433	2,043	55,000	58,000	59,000
1,994	49,829	68,148	77,403	2,044	-		111,800
1,995	90,000	120,000	140,000	2,045	_	_	, 26,600
1,996	-	-	241,616	2,046	_	_	8,800
1,997	231,630	249,686	260,500	2,047	-	-	30,000
1,998	1,480,535	1,485,866	1,559,681	2,048	-		12,000
1,999	131,041	133,413	145,514	2,049	_		18,050
2,000	2,509,623	2,879,828	3,108,555	2,050	~	_	33,322
2,001	2,971,383	2,809,062	3,217,400	2,051	_	_	23,200
2,002	888,420	1,042,651	923,878	2,052	-	-	147,000
2,003	2,530,375	2,462,819	2,449,267	2,053	_	_	16,500
2,004	2,313,177	2,655,947	2,207,553	2,054	-	6,090	-
2,005	1,994,558	2,420,332	2,299,798	2,055	-	-	91,000
2,006	2,849,682	3,145,797	3,264,913	2,056	-	-	19,500
	27,500	_	24,100	2,057	_	_	81,579
2,007	21,000		,				,

ESTABLISH- MENT	VALU	E OF GOODS	MADE	ESTABLISH- MENT	VALU	E OF GOODS	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
2,059	\$5,002,365	\$5,236,719	\$5,500,000	2,109	_	_	\$119,220
2,060	-	18,000,000	16,000,000	2,110	\$50,000	_	
2,061	-	_	9,000	2,111	_	-	12,000
2,062	-	_	16,700	2,112	_	_	10,000
2,063	_	_	56,680	2,113	_	_	14,656
2,064	_		21,000	2,114	_	_	39,260
2,065	_	175,500	200,000	2,115	100,000	\$98,000	100,000
2,066	125,000	120,000	120,000	2,116	71,713	78,476	69,557
2,067	_	_	12,450	2,117	198,000		_
2,068	_	-	13,000	2,118	357,000	550,000	458,000
2,069		_	45,000	2,119		_	6,632
2,070	112,000	115,000	95,000	2,120	_	_	2,241
2,071	_	_	175,000	2,121	_	_	119,770
2,072	46,000	_	_	2,122	_	_	470,232
2,073	84,500	127,600	72,770	2,123	_	_	68,412
2,074	300,000	300,000	300,000	2,124	_	_	47,000
2,075	_	_	22,000	2,125	_	_	27,000
2,076	_	275,000	420,900	2,126	_	_	60,225
2,077	_	2,0,000	26,250	2,127	_	_	9,000
2,078	_	80,000	50,400	2,128	_	_	27,000
2,079	_	_	38,500	2,129	_	-	30,000
2,080	_		35,000	2,130	_	_	27,000
2,081	55,697	55,697	46,855	2,131	_	_	65,000
2,082		55,051	5,668	2,131	_	_	27,000
2,083	_	_ [8,264	2,133	_	_	28,500
2,084	_	_	9,760	2,134	325,000	332,495	149,044
2,085	-	_	16,500	2,134	95,548	60,000	44,256
2,086	_	-	32,775	2,136	36,586	14,518	44,200
2,087	_	875,000	640,400	2,130	46,884	44,600	66,895
2,088	20,130	22,188	20,375	2,138	48,600	50,400	10,200
2,089	20,100	,100 رشت	69,300	2,139	44,052	30,680	30,650
2,090	-	-	105,000	2,139	67,987		50,050
2,091	-	69,200	87,600	2,140	01,901	65,416	7,470
2,092		09,200	82,000		707.000	114,000	81,900
2,092	-	-		2,142	101,000		
2,093	90,766	89,000	17,600 91,000	2,143	-	652,203 58,316	608,321 41,124
2,095	90,700	39,000	, II	2,144	-		
2,096	-	-	40,000	2,145	011.010	210,000	154,400
2,097	97 000	-	25,000	2,146	211,316	233,265	123,115
2,097	35,000	20,000	-	2,147	63,549	40,874	27,279
2,093	9	-	9,800	2,148	176,286	115,617	30,313
2,099	- 070	00.507	7,500	2,149	-	-	493,519
	87,279	82,581	71,000	2,150		-	30,000
2,101	-	-	15,135	2,151	10,575	2,000	2,050
2,102	-	-	12,500	2,152	350,000	32,000	33,258
2,103	-	-	35,000	2,153		-	17,753
2,104	-	-	45,000	2,154	26,645	-	28,555
2,105	71,340	68,500	50,000	2,155	3,087	-	5,497
2,106	89,000	-	-	2,156	400,000	390,000	420,000
2,107	-	-	38,600	2,157	-	133,056	110,880
2,108	-	-	75,000	2,158	48,400	48,400	94,404

${\bf COMPARATIVE\ PRODUCT:\ BY\ ESTABLISHMENTS-Continued}.$

ESTABLISH- MENT	VALUI	or Goods	MADE	ESTABLISH- MENT	VALUI	e of Goods	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
2,159	\$281,300	\$240,760	\$227,857	2,209	\$70,000	\$85,000	\$116,300
2,160	-	-	6,700	2,210	_	-	35,000
2,161	-	-	34,104	2,211	334,000	400,000	325,000
2,162	_	-	23,000	2,212	-	-	16,100
2,163	-	-	106,172	2,213	-	60,000	75,400
2,164	-	-	1,515	2,214	86,913	72,115	56,750
2,165	-	_	66,750	2,215	94,662	70,361	80,789
2,166	-	-	22,300	2,216	_	-	20,000
2,167	_	_	36,815	2,217	-	30,500	35,000
2,168	_	_	3,400	2,218	-	´ _	2,500
2,169	_	_	20,000	2,219	105,000	119,000	110,000
2,170	57,783	54,022	61,675	2,220	157,455	210,288	197,479
2,171	118,414	111,966	237,117	2,221	60,000	60,000	65,000
2,172	, _	_	10,800	2,222	_	_	50,000
2,173	_	2,400	2,800	2,223	_	_	40,000
2,174	_	_,	30,000	2,224	78,240	100,000	75,000
2,175	_	_	5,800	2,224	136,751	150,309	164,197
2,176	_	_	37,000	2,226	166,287	161,208	136,396
2,177	_	_	65,000	2,227	100,201	92,000	67,000
2,178		-	36,000	2,228	70,200	65,000	64,500
2,179		868,976	877,666	2,229	10,200	00,000	30,000
2,180	346,850	340,055	237,358	2,229	145,581	154,440	163,629
2,181	340,000	540,055	12,650		149,951	194,440	9,000
2,182	-	-	37,095	2,231	= 000	75,000	62,000
2,183	-	_		2,232	75,000	, ,	,
2,184	-	-	10,107	2,233	105 600	26,850	10,000
2,185	-	-	22,600	2,234	105,622	68,447	78,000
2,186	109,792	07 100	107,500	2,235	184,830	189,900	169,281
2,180		97,463	112,565	2,236	50,000	57,500	65,000
	63,470	49,077	47,061	2,237	-	-	17,300
2,188	63,521	62,521	101,834	2,238	-		50,000
2,189	-	-	40,933	2,239	160,000	135,000	134,000
2,190	12,000	6,010	11,574	2,240	114,655	123,515	115,350
2,191	-	-	13,747	2,241	304,278	334,576	315,185
2,192	60,000	65,000	50,000	2,242	-	-	4,500
2,193	-	-	24,433	2,243	305,413	252,000	245,925
2,194	-	-	24,784	2,244	- 1	-	23,450
2,195	-	-	15,000	2,245	-	-	21,648
2,196	-	-	91,525	2,246	- 1	-	100,000
2,197	-	-	36,600	2,247	138,193	168,844	206,783
2,198	-	-	45,790	2,248	- 1	-	380,000
2,199	-	-	30,000	2,249	100,000	102,000	96,000
2,200	-	-	10,000	2,250	63,438	45,542	54,562
2,201	300,000	219,000	315,000	2,251	90,000	90,000	64,000
2,202	-	-	291,245	2,252	-	-	10,823
2,203	-	-	40,000	2,253	-	-	42,000
2,204	73,716	86,531	64,104	2,254	185,984	160,058	177,134
2,205	70,707	38,326	64,700	2,255	-	-	29,000
2,206	40,195	44,095	50,050	2,256	-	-	16,995
2,207	-	-	33,741	2,257	- 1	75,280	65,895
2,208	-	-	30,284	2,258	-	~	47,000

${\tt COMPARATIVE\ PRODUCT:\ BY\ ESTABLISHMENTS-Continued.}$

ESTABLISH- MENT	VALUI	E OF GOODS	Made	ESTABLISH- MENT	VALUE OF GOODS MADE			
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889	
2,259		_	\$40,000	2,309	_	_	\$24,000	
2,260	_	_	44,838	2,310	\$868,183	\$515,498	424,553	
2,261	_	_	27,930	2,311	51,634	37,840	34,062	
2,262	_	_	108,000	2,312	79,200	79,342	01,002	
2,263	_	_	16,000	2,313	- 10,200	35,000		
2,264	\$136,290	\$145,202	159,489	2,314	_	-	163,153	
2,265	-	- V	19,371	2,315	_ [_	124,700	
2,266	_	_	9,000	2,316			40,000	
2,267	_	_	28,125	2,317	305,580	263,760	256,000	
2,268	_	_	53,100	2,318	500,000	200,100	12,850	
2,269	_	_	17,167	2,319	_	-	175,000	
2,270	_	_	49,880	2,320	_	_	108,000	
2,271	_	_	29,594	2,320		_	-	
2,272	-	_	13,100	2,321	-	[113,233	
2,273	_	78,000				-	253,883	
2,274	_ [78,245	2,323	-	-	46,391	
2,274	-	65,200	47,737	2,324	-	-	40,000	
2,275	- 000 500		17,300	2,325		-	23,997	
	331,000	297,603	404,928	2,326	225,564	290,000	294,535	
2,277	-	-	22,200	2,327		- 1	16,500	
2,278	30,000	20,000	15,000	2,328	79,400	95,300	86,560	
2,279	208,000	216,000	230,000	2,329	-	-	20,144	
2,280	-	-	18,000	2,330	-	-	26,000	
2,281	-	-	44,876	2,331	-	-	10,347	
2,282	~	-	20,000	2,332	76,366	150,584	151,571	
2,283	-	-	36,000	2,333	256,081	274,000	365,333	
2,284	-	-	55,000	2,334	-	-	57,820	
2,285	-	-	80,000	2,335	- '	188,793	179,000	
2,286	-	-	40,000	2,336	-	-]	49,946	
2,287	-	-	8,661	2,337	-	34,352	36,000	
2,288	-	100,000	200,000	2,338	125,454	207,844	220,240	
2,289	-	21,040	21,233	2,339	249,223	460,157	461,588	
2,290	-	-	29,022	2,340	790,532	894,000	816,608	
2,291	-	706,556	721,946	2,341	142,252	160,003	174,995	
2,292	-	-	48,000	2,342	260,919	275,234	280,520	
2,293	-	-	36,835	2,343	220,000	241,000	261,000	
2,294	-	72,608	112,689	2,344	300,000	314,000	325,000	
2,295	-	-	24,300	2,345	317,794	348,705	290,150	
2,296	223,937	207,727	144,404	2,346	-	-	13,500	
2,297	-	-	3,615,475	2,347	-	-	27,000	
2,298	-	-	25,600	2,348	-	256,092	186,300	
2,299	-		18,000	2,349	151,200	125,080	242,000	
2,300	114,650	106,260	106,260	2,350	-	- 1	30,000	
2,301	60,000	55,000	50,000	2,351	-	-	24,000	
2,302	-	241,435	274,361	2,352	-	, -	35,000	
2,303	_	_	44,732	2,353	_	-	54,000	
2,304	29,347	32,000	46,500	2,354	_	_	113,600	
2,305	40,800	43,854	51,501	2,355	_	_	57,360	
2,306	23,200		21,250	2,356	_	_	50,000	
2,307	456,000	500,000	540,000	2,357	_	_	222,950	
	365,000	365,000	315,000	2,358			5,855	

ESTABLISH-	VALUI	e of Goods	MADE	ESTABLISH- MENT	VALUE OF GOODS MADE		
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
2,359	-	_	\$10,000	2,409	- 1	-	\$16,000
2,360	-	-	125,000	2,410	\$50,000	\$50,000	45,000
2,361	-	-	50,000	2,411	-	-	27,498
2,362	-	_	16,000	2,412	_	-	35,000
2,363	_	-	154,800	2,413	-	-	111,224
2,364	-	-	245,778	2,414	~	-	40,000
2,365	\$130,000	\$125,000	142,000	2,415	40,000	40,306	35,776
2,366	60,000	68,000	67,680	2,416	75,000	-	80,000
2,367	51,500	-	34,000	2,417	125,300	95,000	88,000
2,368	-	-	70,000	2,418	-	-	13,000
2,369	523,131	446,733	463,817	2,419	75,000	69,403	74,000
2,370	61,000	24,000	53,000	2,420	-	-	545
2,371	431,537	320,398	301,967	2,421	-	-	700
2,372	-	4,275,000	3,400,000	2,422	~	180,000	186,000
2,373	131,455	82,397	78,791	2,423	-	-	72,632
2,374	-	-	14,919	2,424	-	8,190	9,130
2,375	43,200	-	52,490	2,425	-	-	10,000
2,376	150,000	100,000	-	2,426	-	-	45,985
2,377	-	-	340,000	2,427	-	-	42,405
2,378	-	-	300,000	2,428	147,572	213,000	212,000
2,379	200,000	200,000	240,000	2,429	-	-	37,500
2,380	158,000	156,750	80,000	2,430	-	-	28,520
2,381	1,058,538	1,048,000	1,100,000	2,431	150,000	158,000	150,000
2,382	96,479	109,000	110,685	2,432	_	-	9,885
2,383	-	-	30,965	2,433	7,250	11,568	16,538
2,384	-	-	120,000	2,434	-	-	9,750
2,385	112,500	135,000	-	2,435	-	-	29,608
2,386	250,000	231,750	242,685	2,436	-	-	6,180
2,387	1,000,000	1,000,000	1,100,000	2,437	-	-	14,800
2,388	396,405	140,000	192,090	2,438	-	-	18,937
2,389	126,100	8 8,990	76,360	2,439	49,995	59,150	64,539
2,390	-	-	19,851	2,440	-	-	20,000
2,391	-	-	10,000	2,441	-	-	24,000
2,392	269,714	269,600	287,800	2,442	-	-	20,000
2,393	-	-	17,941	2,443	-	-	14,077
2,394	~	-	10,000	2,444	-	-	20,000
2,395	-	-	20,000	2,445	-	-	22,000
2,396	-	-	16,000	2,446	-	-	35,000
2,397	-	-	13,000	2,447	-	-	75,000
2,398	-	-	35,000	2,448	-	-	33,000
2,399	-	-	34,921	2,449	75,000	100,000	100,000
2,400	-	-	31,285	2,450	-	-	18,000
2,401	57,000	99,000	91,500	2,451	50,000	41,000	60,000
2,402	-	-	60,000	2,452	-	-	9,200
2,403	-	68,000	60,000	2,453	-	-	46,600
2,404	-	50,000	65,000	2,454	-	-	50,000
2,405	-	-	97,760	2,455	-	-	280,000
2,406	-	-	19,500	2,456	-	-	10,000
2,407	-	-	9,505	2,457	-	-	8,000
2,408	-	-	17,000	2,458	-	-	35,000

ESTABLISH- MENT	VALU	E OF GOODS	MADE	ESTABLISH- MENT	VALUE OF GOODS MADE			
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889	
2,459	_	_	\$15,000	2,509	\$79,625	\$80,980	\$99,6	
2,460	_	_	20,000	2,510	_	-	4,0	
2,461	_	_	24,367	2,511	6,875	26,000	9,00	
2,462	_	_	72,000	2,512	162,690	206,325	162,5	
2,463	_	_	16,000	2,513	115,118	127,354	181,6	
2,461	_	\$40,000	35,000	2,514	453,392	538,565	401,6	
2,465	\$110,200	110,200	130,000	2,515	251,053	256,020	269,5	
2,466	_	_	147,000	2,516	201,000	200,020	501,0	
2,467	_	_	30,000	2,517		_	16,2	
2,468	48,000	35,000	55,800	2,518		_	27,3	
2,469		-	4,000	2,519	583,600	565,840	690,1	
2,470	_	_	16,265	2,520	_	70,000		
2,471	111,000	120,600	120,000	2,521	50,000	46,700	50,0	
2,472	111,000	120,000	16,000	2,522	30,000	42,670	70.0	
2,473		_	170,000	2,522	-	42,070	70,0 46,4	
2,474	104,720	99,696	92,106	2,524	-	-		
2,475	235,876	315,000	325,000		114,709	120,628	45,0	
2,476	400,010	313,000		2,525	114,709	120,028	108,6	
	1,192,806	990,148	35,000	2,526	150,000	150,000	42,0	
2,477 $2,478$	1,132,000		1,252,525	2,527	150,000	150,000	108,9	
•	60,000	64,608	50,490	2,528	-	100,000	104,0	
2,479	68,326	68,194	-	2,529	60,000	60,000	65,0	
2,480	-	-	114,638	2,530		250,000	260,0	
2,481	00.040	150 515	18,674	2,531	9,420	11,000	20,0	
2,482	86,246	152,515	139,651	2,532	-	-	9,6	
2,483	45,000	57,000	61,411	2,533	574,734	405,866	518,2	
2,484	545,227	639,395	639,395	2,534	-	-	75,0	
2,485		_	173,000	2,535	500,000	500,000	430,0	
2,486	1,706,147	1,811,187	1,678,685	2,536	-	-	58,5	
2,487	-	-	29,000	2,537	284,463	241,794	185,3	
2,488	-	-	70,899	2,538	-	100,000	105,0	
2,489	-	-	9,750	2,539	75,000	60,000	80,0	
2,490	71,062	70,221	-	2,540	300,000	409,000		
2,491	-	-	134,790	2,541	-	60,000	60,0	
2,492	-	-	49,308	2,542	-	-	35,0	
2,493	107,700	108,207	121,568	2,543	-	-	57,2	
2,494	-	204,000	-	2,544	88,000	-	80,0	
2,495	450,201	533,370	575,833	2,545	123,952	130,430	121,8	
2,496	128,584	122,743	135,809	2,546	-	-	23,0	
2,497	112,189	122,819	125,479	2,547	-	-	50,0	
2,498	126,330	135,866	140,961	2,548	-	-	3,5	
2,499	111,835	109,823	115,333	2,549	127,949	121,774	112,0	
2,500	-	20,000	12,250	2,550	-	-	65,9	
2,501	_	-	36,016	2,551	184,000	190,800	210,0	
2,502	107,600	107,100	110,865	2,552	297,279	269,986	249,0	
2,503	_	500,000	595,000	2,553	100,000	90,000		
2,504	-	-	5,979	2,554		318,000	260,0	
2,505	585,504	394,169	445,224	2,555	105,703	105,173	110,0	
2,506	312,708	312,708	188,245	2,556	_	_	30,0	
2,507	47,650	46,000	57,000	2,557	_	_	23,4	
2,508	136,977	135,986	155,422	2,558		62,790	86,1	

ESTABLISH-	VALUE	or Goods	MADE	ESTABLISH-	VALUE	e of Goods	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
2,559	_	_	\$42,000	2,609	_	_	\$20,000
2,560	-	\$7,500	-	2,610	-	-	40,765
2,561	\$65,887	103,265	_	2,611	_	_	20,000
2,562	150,000	150,000	156,250	2,612	-	-	76,000
2,563	250,000	300,000	350,000	2,613	_	_	45,000
2,564	-	-	201,819	2,614	_	_	26,730
2,565	142,922	150,000	180,000	2,615	_	_	20,000
2,566	-	245,520	245,520	2,616	_	_	45,000
2,567	_	-	210,000	2,617	_	_	70,000
2,568	-	120,000	120,000	2,618	_	_	4,646
2,569	_	55,000	55,000	2,619	-	-	960,000
2,570	_	_	45,000	2,620	_	-	15,356
2,571	_	_	15,000	2,621	_	_	35,000
2,572	_	-	13,002	2,622	_	-	28,080
2,573	_	_	116,000	2,623	\$207,228	\$176,145	,
2,574	59,326	60,230	60,230	2,624	Q201,220	-	316,000
2,575	394,005	282,000	228,500	2,625	_	_	20,000
2,576	265,000	273,000	243,500	2,626	_	_	30,100
2,577	250,000	500,000	500,000	2,627	_	_	69,300
2,578	_	- 000,000	192,500	2,628	_	_	127,500
2,579	55,200	43,800	43,800	2,629	_		450,000
2,580	70,000	70,000	75,000	/ /	-	-	18,360
2,581	10,000	10,000	38,940	2,630			25,200
2,582	1,580	3,600	90,940	2,631		-	560,400
2,583	1,550	3,000	9,200	2,632	-	_	
2,584	9,500	-	9,200	2,633	-		11,500
2,585	100,000	110 000	101,753	2,634	-	-	45,500
2,586	65,000	113,233 60,000	50,000	2,635	-	-	11,191
2,587	21,370	00,000	50,000	2,636	-	-	36,720
2,588	21,570	114,660	64,260	2,637	-	-	72,000
2,589	-	114,000	25,396	2,638	-	-	60,000
	82,610	- 00 070		2,639	-	-	42,912
2,590	52,010	82,610	48,540	2,640	-	100.000	750,000
2,591 2,592	-	-	214,311	2,641	90,000	100,000	100,000
	-	-	23,000	2,642	-	-	139,993
2,593	-	-	18,000	2,643	-	-	106,000
2,594	70.000	#0.040	56,720	2,644	-	-	31,000
2,595	79,200	79,342	70,000	2,645	-		300,000
2,596	-	69,666	70,320	2,646		-	1,275,000
2,597	175,000	190,000	194,512	2,647	615,000	600,000	100.000
2,598	-	673,738	733,216	2,648	-	-	100,000
2,599	-	-	14,000	2,649	-	-	18,000
2,600	-	-	40,000	2,650	-		13,621
2,601	-	-	27,500	2,651	83,816	72,650	101,160
2,602	-	-	141,125	2,652	342,606	358,462	300,000
2,603	-	-	6,600	2,653	120,706	-	-
2,604	-	-	70,000	2,654	-	-	20,501
2,605	~	-	210,000	2,655	-	236,566	211,864
2,606	-	-	108,000	2,656	37,875	\$0,000	28,442
2,607	-	-	8,000	2,657	-	-	86,884
2,608	-	-	30,000	2,658	53,696	90,000	75,673

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH- MENT	VALUE	e of Goods	MADE	ESTABLISH- MENT	VALU	MADE	
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
2,659	-	\$214,000	\$250,000	2,709	\$944,500	\$935,925	\$1,057,437
2,660	-	111,000	136,800	2,710	-	_	8,320
2,661	-	-	25,000	2,711	60,000	45,225	8,150
2,662	-	_	100,000	2,712	122,617	141,211	148,000
2,663	-	45,000	47,000	2,713		107,707	81,108
2,664	-	220,000	220,000	2,714	43,400	45,745	50,452
2,665	_	, <u> </u>	20,000	2,715	62,114	62,697	77,523
2,666	_	_	17,040	2,716	64,000	81,000	94,000
2,667	-	_	55,000	2,717	373,330	325,237	330,000
2,668	_	_	23,200	2,718	165,739	155,332	164,542
2,669	_ [_	90,000	2,719	_		62,185
2,670	\$120,000	125,000	120,000	2,720	_	200,000	270,000
2,671	\$120, 000		157,584	2,721	215,000	200,000	167,850
2,672	_	_	175,000	2,722		100,000	101,000
2,673	_	_	60,000	2,723		220,000	_
2,674	86,450	137,250	177,500	1 .	342,606	358,462	300,000
2,675	570,000	600,000	570,000	2,724	120,706	500,402	300,000
2,676	310,000	000,000	5,841	2,725	120,700	236,566	_
	6,000	10,000	6,160	2,726	83,816	72,650	_
2,677		10,000	0,100	2,727	, ,	•	_
2,678	3,450 141,000	175 000	0.17.000	2,728	138,393	126,606	100 000
2,679		175,000	247,296	2,729	- 1	-	400,000
2,680	396,018	295,169	378,000	2,730	-	-	32,791
2,681	56,078	60,006	53,209	2,731	-	-	18,220
2,682	-	-	128,000	2,732		-	880,000
2,683	-	-	360,000	2,733	80,000		-
2,684	-	-	22,500	2,734	-	1,250,000	-
2,685	-	-	444,571	2,735	60,000	-	-
2,686	-	-	11,500	2,736	101,830	115,829	-
2,687	279,630	-	-	2,737	-	432,000	-
2,688	-	180,450	150,000	2,738	71,400	-	-
2,689	210,500	209,430	235,000	2,739	615,000	650,000	-
2,690	-	-	33,750	2,740	347,000	318,000	-
2,691	-	-	20,000	2,741	-	41,827	-
2,692	-	300,000	385,000	2,742	467,758	-	-
2,693	-	-	30,000	2,743	35,000	-	-
2,694	-	-	30,000	2,744	82,924	-	-
2,695	-	-	454,860	2,745	40,000	-	-
2,696	375,000	350,000	270,000	2,746	-	30,000	-
2,697	-	-	70,000	2,747	50,000	70,000	-
2,698	-	-	1,216,176	2,748	-		51,185
2,699	-		40,800	2,749	96,000	-	100,000
2,700	183,901	203,845	253,008	2,750	~	-	9,948
2,701	446,228	401,400	376,717	2,751	-	_	42,000
2,702	250,000	288,000	142,520	2,752	-	-	35,774
2,703	-	-	25,000	2,753	-	_	9,000
2,704	59,485	68,652	78,550	2,754	-	_	20,200
2,705	74,516	84,881	75,381	2,755	-	-	25,000
2,706	3,300	9,446	4,190	2,756	-	-	25,000
2,707	51,600	50,784	46,080	2,757	_	_	57,500
2,708	-	´ _	23,000	2,758	-	_	36,000

ESTABLISH-	VALUE	or Goods	MADE	ESTABLISH-	VALUE	or Goods	MADE
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889
2,759	-	_	\$8,100	2,809	-	_	\$67,431
2,760	-	-	2,724	2,810	-	-	65,000
2,761	-	-	30,000	2,811	-	-	18,000
2,762	- 1	_	15,748	2,812	-	-	26,450
2,763	\$61,000	\$50,000	44,000	2,813	\$76,783	\$78,716	81,811
2,764	-	- 1	30,500	2,814	70,341	66,776	52,500
2,765	-	65,444	71,886	2,815	4	-	32,386
2,766	-	_	45,000	2,816	-	-	20,440
2,767	-	58,257	58,735	2,817	-	-	18,300
2,768	42,280	59,600	66,000	2,818	-	-	21,250
2,769	-	-	50,100	2,819	-	-	17,601
2,770	-	_	12,000	2,820	242,225	260,602	142,129
2,771	136,000	132,000	138,000	2,821			11,500
2,772	_	-	24,000	2,822	41,664	33,222	27,391
2,773	_	_	6,000	2,823	_	-	32,900
2,774	_	-	3,492	2,824	_	_	5,900
2,775	_ [9,000	2,825	_	_	\$0,000
2,776	_	_	8,400	2,826	_ 1		39,137
2,777	-	-	157,619	2,827	52,050	55,500	48,100
	-		5,000	2,828	52,050		28,000
2,778 2,779		-	14,393	2,829	-	-	
	-	-	1	2,829	-	-	6,360
2,780	-	-	49,610		-	-	15,680
2,781	-	-	12,000	2,831	-	900,000	800,000
2,782	-	-	4,000	2,832	-	-	710,000
2,783	-	-	6,500	2,833	-	-	250,000
2,784	-	-	22,000	2,834	-	E00.0E1	100,000
2,785	-	-	70,000	2,835	-	738,871	682,960
2,786	-	-	71,552	2,836	-	-	17,000
2,787	-	-	650,000	2,837	-	450,000	400,000
2,788		-	37,199	2,838	-		40,000
2,789	- }	-	25,000	2,839	274,682	299,569	227,579
2,790	-	-	5,229	2,840	-	-	35,000
2,791	-	-	62,950	2,841	250,000	400,000	295,000
2,792	-	-	19,000	2,842	-	-	63,000
2,793	-	-	12,500	2,843	-	-	22,000
2,794		-	20,000	2,844	432,600		450,000
2,795	-	-	19,000	2,845	140,000	150,000	175,000
2,796	69,654	63,900	73,764	2,846	-	-	20,000
2,797	-	-	15,519	2,847	658,352	698,655	562,390
2,798	-	-	25,000	2,848	-	-	25,000
2,799	-	-	25,781	2,849	50,000	80,000	60,000
2,800	-	-	10,000	2,850	44,115	-	52,585
2,801	-	-	50,000	2,851	280,000	395,000	413,000
2,802	-	81,000	90,400	2,852	46,127	45,716	35,623
2,803	60,000	67,650	51,500	2,853	-	-	12,070
2,804	-	-	42,000	2,854	-	-	178,700
2,805	122,473	-	59,928	2,855	-	-	3,533
2,806	71,000	100,000	120,000	2,856	-		220,000
2,807	44,000	-	34,270	2,857	500,000	600,000	700,000
2,808	12,000	143,000	100,000	2,858	-	-	20,000

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH-	VALU	E OF GOODS	MADE	ESTABLISH-	VALUE OF GOODS MADE			
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889	
2,859	_	_	\$19,600	2,909		\$1,117,367	\$1,230,571	
2,860	_	_	1,750	2,910	\$419,644	407,000	452,902	
2,861	\$88,700	\$96,500	108,000	2,911		-	44,000	
2,862	_	_	50,000	2,912	87,601	_	108,976	
2,863	_	_	327,525	2,913	225,509	252,056	212,381	
2,864	_	_	15,000	2,914	190,161	210,725	225,793	
2,865	_	-	182,289	2,915	59,253	54,323	44,585	
2,866	_	_	30,000	2,916	87,399	168,588	_	
2,867	_	_	20,252	2,917	427,450	404,528	573,703	
2,868	_	-	275,000	2,918	45,409	51,080	37,603	
2,869	_	_	65,000	2,919	30,000	59,000	84,100	
2,870	_	_	43,090	2,920	_	_	33,000	
2,871	_	_	35,000	2,921	_	270,063	313,481	
2,872	_	_	464,500	2,922	200,103	209,637	228,150	
2,873	_	_	4,000	2,923	370,792	402,221	441,809	
2,874	_	_	78,000	2,924	430,008	461,008	750,000	
2,875		_	187,409	2,925	972,388	1,139,093	1,071,250	
2,876	_		75,000	2,926	443,933	448,777	664,215	
2,877	_	_	2,500	2,927	410,500	159,485	122,486	
2,878	_		11,000	2,928	_	100,000	118,700	
2,879	_	-			111 046	125,024	135,568	
	_	102 600	115,980	2,929	111,946	,	1	
2,880	-	103,622	300,000	2,930	151,788	158,977	167,096	
2,881	-	-	68,000	2,931	-	-	1,079,000	
2,882	-	-	120,000	2,932	-	-	43,496	
2,883	407.000	400 150	75,000	2,933	-	-	52,269	
2,884	435,209	406,176	433,121	2,934	-	-	68,469	
2,885	676,506	772,742	733,847	2,935	-	-	1,116,284	
2,886	774,421	836,102	873,250	2,936	-	-	100,000	
2,887	209,301	206,250	209,625	2,937	-	-	241,570	
2,888	17,441	18,361	16,881	2,938	-	-	76,606	
2,889	611,679	951,559	1,181,274	2,939	-	-	25,000	
2,890	256,089	315,413	303,666	2,940	-	-	14,839	
2,891		-	10,049	2,941	-	-	25,000	
2,892	362,021	427,533	421,025	2,942	-	-	12,000	
2,893	534,031	672,295	632,200	2,943	-	-	15,225	
2,894	926,896	918,798	901,189	2,944	-	-	16,416	
2,895	961,350	937,545	1,054,301	2,945	-	-	557,823	
2,896	178,810	195,156	183,176	2,946	-	-	130,000	
2,897	413,730	467,259	484,246	2,947	-	_	11,000	
2,898	616,845	623,126	628,621	2,948	-	-	4,742	
2,899	551,675	621,572	642,853	2,949	-	-	15,510	
2,900	881,995	913,280	961,500	2,950	-		10,000	
2,901	328,860	433,902	497,885	2,951	-	-	6,000	
2,902	863,978	951,396	1,351,281	2,952	-	-	15,000	
2,903	1,996,880	2,252,666	2,467,642	2,953	-	-	7,000	
2,904	-	-	332,354	2,954	-	-	20,000	
2,905	1,190,000	1,209,429	1,347,736	2,955	-	-	3,300	
2,906	868,205	921,848	924,592	2,956	-	-	1,500	
2,907	47,524	57,303	48,274	2,957	-	-	20,000	
2,908	102,080	93,600	79,200	2,958	-		3,168	

ESTABLISH-	VALUE	of Goods	MADE	ESTABLISH- MENT	VALUE OF GOODS MADE			
MENT NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889	
2,959	-	-	\$5,000	3,009	\$400,000	\$750,000	\$800,00	
2,960	-		5,000	3,010	_	-	255,03	
2,961	\$259,021	\$263,421	288,096	3,011	_	1,377,932	•	
2,962	-	_	23,827	3,012	_	31,000		
2,963	-	_	25,000	3,013	- 1	190,762		
2,964	-	-	31,125	3,014	32,698	42,000	27,40	
2,965	-	· -	8,263	3,015	_	_	13,5	
2,966	82,435	124,085	169,491	3,016	_	_	150,0	
2,967	15,700	58,310	19,808	3,017	_	_	43,0	
2,968	_	_	278,922	3,018	_	_	33,2	
2,969	_	_	88,351	3,019	_	_	22,5	
2,970	15,824	24,711	33,000	3,020	_	_	1,5	
2,971	121,500	163,000	241,576	3,021	_	_	4,0	
2,972	121,000	100,000	11,616	3,022	' _		350,0	
2,973			31,000	3,023		-	39,0	
2,974	151,341	255,557	267,517	3,024		_	1,225,0	
2,975	101,041	100,000	199,636	1 1	475,000		500,0	
2,976	46,192	59,154	57,895	3,025	410,000	-		
,			98,000	3,026	_	-	650,0	
2,977	197,000	240,500		3,027	-	-	13,0	
2,978		-	9,856	3,028	-	-	37,0	
2,979	49,823	-		3,029	-	-	18,0	
2,980	-	127,541	108,051	3,030	-	-	17,0	
2,981	-		53,024	3,031	-	-	9,7	
2,982	136,616	144,285	144,825	3,032	-	-	3,1	
2,983	-	-	10,000	3,033	-	-	30,0	
2,984	-	-	40,000	3,034	-	-	56,4	
2,985	-	-	40,000	3,035	-	-	90,5	
2,986	-	-	10,000	3,036	-	-	15,0	
2,987	-	126,000	170,000	3,037	-	- 1	7,1	
2,988	-	77,647	100,000	3,038	-	-	172,1	
2,989	57,550	55,000	52,000	3,039	-	-	39,0	
2,990	-	410,000	400,000	3,040	-	- [4,5	
2,991	80,000	75,000	100,000	3,041	70,000	70,000	70,0	
2,992	160,000	300,000	400,000	3,042	226,610		280,0	
2,993	2,127,800	2,256,870	2,319,850	3,043	_		7,0	
2,994	1,149,000	1,024,000	1,066,000	3,044	212,000	220,000	178,2	
2,995	-	-	35,000	3,045	-	-	12,3	
2,996	-	13,000	36,000	3,046	-	-	60,0	
2,997	64,000	60,750	53,950	3,047	_	-	45,0	
2,998	67,708	55,108	51,341	3,048	-	302,000	302,0	
2,999	41,943	58,926	62,006	3,049	54,371	50,000	50,0	
3,000	-	_	141,402	3,050	_	140,000	150,0	
3,001	-	_	26,000	3,051	250,000	215,000	279,5	
3,002	-	_	20,400	3,052	80,000	70,000	56,0	
3,003	26,050	92,378	49,000	3,058	144,501	148,000	151,0	
3,004	_	_	57,000	3,054	_		25,0	
3,005	152,000	174,865	183,586	3,055	80,000	73,000	77,0	
3,006	998,000	1,517,250	950,000	3,056	76,405	70,866	76,0	
3,007	-,.,.	,,	40,000	3,057			25,0	
3,008		60,000	63,750	3,058	174,037	179,885	182,0	

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH- MENT	VALUE	of Goods	MADE	ESTABLISH- MENT	VALU	E OF GOODS	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
3,059	- A	_	\$6,650	3,109	_	\$132,000	-
3,060	\$90,000	\$80,000	85,000	3,110	-	-	\$22,400
3,061	46,127	47,597	1,002	3,111	\$113,000	-	95,000
3,062	-	-]	12,000	3,112	-	70,000	35,000
3,063	_	-	23,260	3,113	-	120,000	111,852
3,064	49,512	48,627	47,963	3,114	35,000	24,000	35,000
3,065	_	-	45,000	3,115	137,995	132,079	210,990
3,066	_	-	32,400	3,116	_	306,000	425,843
3,067	_	_	150,000	3,117	_		35,561
. 3,068	_	_	33,180	3,118	211,445	221,519	265,400
3,069	_	-	13,350	3,119	504,000	455,000	535,500
3,070	_	_	8,000	3,120	187,686	149,993	176,947
3,071	_	_	20,000	3,121	195,900	_	128,908
3,072	_	}	93,487	3,122	229,134	150,288	180,535
3,073	_ [_	43,800	3,123	485,000	480,000	124,000
3,074	_	_	8,280	3,124	161,375	335,000	522,600
3,075	_	1	11,039	3,125	385,968	404,604	429,613
	-	-	, ,	3,126		1,590	
3,076	-	-	150,300		1,217		1,021
3,077	-	-	148,657	3,127	32,400	38,200	64,188
3,078	-	-	10,300	3,128	-	-	16,516
3,079	-	-	82,934	3,129	-	105,000	111,212
3,080	-	-	4,700	3,130	-	-	57,332
3,081	-	-	40,000	3,131	-	-	9,500
3,082	-	-	16,649	3,132	-	-	12,000
3,083	-	-	12,300	3,133	-	-	50,000
3,084	-	-	13,000	3,134	-	-	33,723
3,085	-	-	61,000	3,135	-	-	15,000
3,086	25,000	-	35,000	3,136	-	30,000	30,000
3,087	- 1	-	30,000	3,137	-	-	5,520
3,088	-	-	1,000	3,138	100,000	72,000	68,000
3,089	-	- 1	245,057	3,139	66,000	35,850	34,000
3,090	-	-	20,000	3,140	-	-	44,500
3,091	799,545	653,234	-	3,141	19,000	25,350	45,177
3,092	-	69,000	54,000	3,142	_	-	33,840
3,093	-	-	155,839	3,143	_	-	11,500
3,094	-	121,000	147,000	3,144	39,072	42,850	31,284
3,095	28,675	49,000	57,000	3,145	_	-	60,000
3,096	172,642	194,368	_	3,146	56,377	30,360	62,556
3,097	-	-	87,445	3,147	165,250	-	152,500
3,098	_	- }	9,000	3,148	_	32,300	_
3,099	_	_ 1	35,547	3,149	247,463	220,000	_
3,100	72,250	50,000	70,000	3,150	250,000		_
3,101	_ !	_	16,000	3,151	38,000	_	
3,102	_	_	48,976	3,152	200,000	166,500	
3,103	_	45,000		3,153	238,000		_
3,104	_	76,500	145,784	3,154	375,000	_	
3,105	_	- 5,500	67,806	3,155		_	50,000
3,106	-	75,000	75,000	3,156	_	_	24,899
3,107	-	10,000	23,311	1	_	_	32,067
	-	-		3,157	-	-	
3,108	-	-	23,995	3,158	-	-	14,650

No. 36.] COMPARATIVE PRODUCT.

COMPARATIVE PRODUCT: BY ESTABLISHMENTS -

ESTABLISH-	VALU	e of Goods	Made	ESTABLISH-	VALUE OF GOODS MADE			
MENT NUMBER.	1887	1888	1889	MENT NUMBER.	1887	1888	1889	
3,159	_	_	\$89,661	3,209	_	_	\$33,900	
3,160	_	_	12,000	3,210	_	_	12,132	
3,161	_	_	36,000	3,211	\$106,500	\$152,440	231,505	
3,162	_	_	22,000	3,212	-		12,493	
3,163	\$220,000	\$225,000		3,213	65,000	70,000	70,000	
3,164	79,045	87,477	84,715	3,214	38,700	52,500	52,500	
3,165	-		71,000	3,215	328,720	300,300	276,318	
3,166	_	_	414,192	3,216	020,120	-	15,137	
3,167		_	3,105	3,217	_	_	12,000	
3,168	48,780	43,000	34,557	3,218	_		40,000	
3,169	40,100	275,000	250,000	3,219	84,136	93,500	70,370	
3,170	247,463	220,000	102,156	3,220	34,100	40,000	50,690	
3,171	336,775			3,221	120,234			
		416,608	300,000	3,222	· ' ' !	135,460	222,679	
3,172	80,000	123,000	58,484		110,000	21,170	31,365	
3,173	150,000	158,400	180,000	8,223	132,346	131,141	155,667	
3,174	275,000	265,000	316,500	3,224	-	-	6,021	
3,175	_	-	78,000	3,225	_		11,166	
3,176		-	15,000	3,226	406,700	407,695	264,988	
3,177	24,400	24,800	20,831	3,227	177,000	215,649	290,000	
3,178	-	-	7,400	3,228	-	-	24,846	
3,179	-	50,000	14,920	3,229	- 1	-	3,000	
3,180	-	80,000	86,775	3,230	-	- 1	7,000	
3,181	-	-	3,000	3,231	129,863	117,541	132,132	
3,182	-	-	18,000	3,232	16,132	-	18,110	
3,183	133,308	121,236	79,460	3,233	-	-	18,000	
3,184	144,000	240,000	204,000	3,234	-	-	50,000	
3,185	242,000	211,740	177,050	3,235	-	-	32,463	
3,186	94,334	80,000	86,196	3,236	67,057	57,000	74,328	
3,187	-	210,846	306,040	3,237	231,402	242,248	324,467	
3,188	-	-	119,500	3,238	-	-	15,600	
3,189	-	-	6,710	3,239	-	-	20,000	
3,190	80,000	123,200	-	3,240	-	-	39,300	
3,191	120,000	-	-	3,241	147,522	222,100	250,325	
3,192	-	254,667	-	8,242	-	- 1	221,459	
3,193	-	-	10,902	3,243	122,010	151,700	373,800	
3,194	72,000	60,000	68,350	3,244	-	-	65,000	
3,195	-	-	16,320	3,245	_	137,602	-	
3,196	-	- 1	32,500	3,246	-	-	20,000	
3,197	-	-	9,737	3,247	71,100	102,000	106,000	
3,198	-	-	11,469	3,248	-	24,000	18,000	
3,199	-	-	35,207	3,249	-	- 1	20,827	
3,200	59,086	60,036	63,036	3,250	185,309	177,521	192,908	
3,201	-	_	45,000	3,251	50,000	55,000	63,000	
3,202	36,000	48,000	36,000	3,252	384,930	370,652	418,115	
3,203	-	_	30,329	3,253	850,000	875,000	880,000	
4 3,204	_	_	36,000	3,254	-	_	11,443	
3,205	51,874	95,545	103,570	3,255	-	-	31,112	
3,206	979,532	1,058,890	1,504,104	3,256	_	_	10,640	
3,207	88,000	90,000	85,450	3,257	150,000	160,000	148,429	
3,208	_	317,159	275,628	3,258	-	128,460	80,796	
			1	-,		,	, , , , ,	

ESTABLISH- MENT	VALU	E OF GOODS	MADE	ESTABLISH- MENT	VALU	E OF GOODS	MADE
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
3,259	\$67,714	\$99,589	\$77,431	3,309	_	_	\$168,000
3,260	-	-	50,000	3,310	\$100,000	\$110,000	150,000
3,261	71,048	81,828	87,880	3,311	_	_	74,735
3,262	-	-	38,667	3,312	_	_	26,000
3,263	-	-	5,000	3,313	_	71,786	75,759
3,264	-	- 1	22,595	3,314	_	-	8,000
3,265	-	64,827	63,014	3,315	-	-	42,000
3,266	513,444	510,000	491,700	3,316	_	_	35,342
3,267	-	-	25,000	3,317	79,045	87,477	_
3,268	-	-	18,136	3,318	100,000	110,000	-
3,269	52,010	51,603	53,235	3,319	50,000	45,000	_
3,270	196,000	162,700	275,471	3,320	250,000	500,000	_
3,271	645,857	505,909	660,167	3,321	51,661	57,371	_
3,272	-	_	32,000	3,322	96,470	100,470	_
3,273	115,000	167,324	208,442	3,323	180,142	187,773	_
3,274	121,000	78,975	63,241	3,324	′ _	170,333	170,000
3,275	_	-	30,000	3,325	-	_	30,000
3,276	137,718	98,682	102,650	3,326	_	_	60,000
3,277	119,942	108,424	92,034	3,327	_	_	35,000
3,278	162,078	200,630	394,826	3,328	_	_	107,000
3,279	197,731	213,538	220,225	3,329	_	_	10,000
3,280	222,200	326,000	326,000	3,330	-	_	184,727
3,281	_	_	96,000	3,331	_	_	28,000
3,282	_	- 1	652,189	3,332	78,344	88,990	81,800
3,283	- 1	-	14,000	3,333	_	_	17,600
3,284	532,193	-	558,910	3,334	_	_	22,000
3,285	_	-	13,499	3,335	-	, _	21,478
3,286	-	_	30,054	3,336	250,000	-	308,000
3,287	-	_]	35,000	3,337	-	-	15,000
3,288	_	_	16,000	3,338	_	_	6,030
3,289	_	_	22,500	3,339	14,375	-	50,000
3,290	-	-	139,000	3,340	-	320,000	306,180
3,291	-	_	28,000	3,341	51,661	57,371	66,163
3,292	-	-	80,000	3,342	38,000	42,750	43,500
3,293	-	32,000	33,500	3,343	_	-	25,000
3,294	-	-	60,000	3,344	-	-	26,389
3,295	-	-	49,779	3,345	-	-	37,000
3,296	-	10,000	37,000	3,346	-	-	1,050
3,297	-	-	20,000	3,347	-	-	116,250
3,298	-	-	31,000	3,348	-	-	47,800
3,299	81,875	140,918	170,344	3,349	-	_	12,000
3,300	-	-	44,590	3,350	-	-	105,000
3,301	57,000	54,000	54,500	3,351	63,512	62,500	63,250
3,302	45,000	53,000	60,000	3,352	96,470	100,470	114,793
3,303	-	-	10,000	3,353	-	-	30,000
3,304	-	600,000	525,000	3,354	-	-	25,000
3,305	-	- 1	150,000	3,355	55,546	56,305	62,185
3,306	-	-	35,000	3,356	47,117	32,871	32,871
3,307	-	-	20,000	3,357	-	-	40,000
0,001							

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued.

ESTABLISH-	VALUE	or Goods	Made	ESTABLISH- MENT	VALU	e of Goods	Made
MENT NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889
3,359	_	\$199,400	\$199,400	3,409		-	\$378,703
3,360	-	_	16,550	3,410	-	-	12,000
3,361	-	300,354	361,222	3,411	-	_	1,000
3,362	\$528,024	502,300	537,925	3,412	-	-	1,200
3,363	320,400	303,141	315,100	3,413	\$96,275	\$81,462	85,135
3,364	_	· -	22,770	3,414	25,000	25,000	83,708
3,365	88,000	86,580	122,000	3,415	-	-	24,000
3,366	_	_	21,420	3,416	_	_	17,500
3,367	-	_	19,088	3,417	_	_	14,778
3,368	_	45,084	49,935	3,418	-	_	17,127
3,369	221,970	240,062	223,125	3,419	_ [_	170,000
3,370	639,241	591,722	633,500	3,420	_	-	25,000
3,371	50,000	37,500	37,500	3,421	_	_	7,000
3,372	423,000	419,259	417,720	3,422	_	_	13,000
3,373	163,608	247,314	354,378	3,423		_	35,453
3,374			75,000	3,424		-	7,800
3,375	150,000	134,556	145,000	3,425	_	_	120,000
3,376	100,000	101,000	34,988	3,426	_	_	12,000
3,377	252,533	291,515	333,904	3,427	_	_	14,863
3,378	124,800	231,010	555,504	3,428	_	_	12,110
3,379	124,000	-	125,000	3,429			18,000
	-	-		3,430	129,615	100,000	90,000
3,380		-	10,175		129,010	100,000	14,000
3,381		-	7,500	3,431	255,070	214,090	91,308
3,382	-	-	42,126	3,432	200,010	214,090	22 250
3,383	-	-	16,732	3,433	_	-	19,346
3,384	-	-	650	3,434	_	9,118	8,250
3,385	-	- 1	13,250	3,435	-	70,000	60,000
3,386	-	-	41,000	3,436	407.000		
3,387	-	-	6,000	3,437	431,968	418,093	449,082
3,388	-	-	5,340	3,438	1,953,504	1,835,170	1,776,100
3,389	-	-	50,000	3,439	56,280	74,952	76,265
3,390	-	-	789,501	3,440	223,848	276,800	291,195
3,391	-	-	22,000	3,441	- 1	177 000	387,465
3,392	3,600	-	4,063	3,442	140,742	175,926	434,032
3,393	-	-	5,305	3,443	220,676	*^^	-
3,394	-	-	90,500	3,444	150,829	183,000	200,000
3,395	-	-	7,200	3,445	117,149	115,354	96,520
3,396	-	-	14,000	3,446	_	-	9,892
3,397	- }	-	28,000	3,447	63,000	65,000	66,000
3,398	-	-	30,000	3,448	450,000	500,000	550,000
3,399	-	-	45,000	3,449	81,400	61,668	-
3,400	- 1	-	85,800	3,450	-	-	3,330
3,401	-	-	32,420	3,451	-	204,301	152,796
3,402	-	-	7,250	3,452	372,926	367,914	345,172
3,403	-	~	23,965	3,4 53	-	-	31,450
3,404	-	-	13,700	3,454	-	-	19,800
3,405	-		4,193	3,455	-	-	62,100
3,406	-	-	10,000	3,456	-	-	12,500
3,407	-		22,836	3,457	86,000	77,500	80,650
3,408	-	_	60,600	3,458	-	-	350,728

COMPARATIVE PRODUCT: BY ESTABLISHMENTS—Continued.

ESTABLISH-	VALUE	or Goods	MADE	ESTABLISH-	VALUE OF GOODS MADE			
NUMBER.	1887 1888 1889		1889	MENT NUMBER.	1887	1888	1889	
3,459	\$84,830	-	\$93,000	3,468	_	_	\$150,000	
3,460	-	-	125,000	3,469	-	_	114,140	
3,461	-	-	12,000	3,470	-	~	225,000	
3,462	-	-	73,000	3,471	-	-	1,250,000	
3,463	-	-	45,600	3,472	-	-	110,000	
3,464	-		66,041	3,473	-	-	80,000	
3,465	-	-	191,701	3,474	-	\$432,000	446,000	
3,466	-	-	47,000	3,475	\$101,830	115,829	125,000	
3,467	-	-	58,274	3,476	-	-	20,000	

RECAPITULATION BY INDUSTRIES. ESTABLISHMENTS.

[This recapitulation relates to the 3,494 establishments which made returns of value of product for one or more of the three years considered; on the basis of value of product, it shows the respective number of establishments indicating an increase, a decrease, no change in value of product, or no return of value of product.]

		1888	AS COMPA	RED WITH	1887	
	1ndustries.	Increase	Decrease	No change	Not given	Total
1	Agricultural implements,	3	2	_	3	8
2	Arms and ammunition,	5	4	1	3	13
3	Artisans' tools,	5	2	2	18	27
4	Awnings, tents, and decorations,	_	-	-	4	4
5	Boots and shoes,	223	99	16	287	625
6	Boxes (paper and wooden),	13	6	3	87	109
7	Brick, tiles, and sewer pipe,	-	-	-	39	39
8	Brooms, brushes, and mops,	-	-	-	22	22
9	Burial cases, caskets, coffins, etc.,	1	- 1	-	7	8
10	Buttons and dress trimmings,	3	3	-	8	14
11	Carpetings,	4	3	-	9	16
12	Carriages and wagons,	16	5	1	46	68
13	Cement, kaolin, lime, and plaster,	_	-	-	5	5
14	Chemical preparations (compounded), .	1	1	-	5	7
15	Clocks and watches,	1	1	-	6 ·	8
16	Clothing,	30	24	2	65	121
17	Cooking, lighting, and heating apparatus,	1	1	-	33	35
18	Cordage and twine,	10	2	-	14	26
19	Corks, bungs, and taps,	-	-	-	4	4
20	Cotton goods,	101	36	2	34	173
21	Cotton, woollen, and other textiles,	1	-	1	1	3
22	Crayons, pencils, crucibles, etc.,	-	-	-	4	4
23	Drugs and medicines,	-	-	-	15	15
24	Dyestuffs,	1	-	-	6	7
25	Earthen, plaster, and stone ware,	_	-	-	4	4
26	Electrical apparatus and appliances,	_	-	-	6	6
27	Electroplating,	_	-	-	10	10
28	Emery and sand paper and cloth, etc., .	1	1	-	9	11
29	Fancy articles,	-	-	-	7	7
30	Fertilizers,	1	-	-	5	6

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Continued.

Establish-	VALUE	of Goods I	MADE	ESTABLISH-	VALUE OF GOODS MADE			
NUMBER.	1887	1888	1889	NUMBER.	1887	1888	1889	
3,477	-	-	\$29,743	3,486	-	-	\$14,500	
3,478	-	-	31,900	3,487	\$46,977	\$73,644	82,100	
3,479	-	-	12,500	3,488	-	1,000,239	1,032,720	
3,480	-	-	522,000	3,489	-	-	53,400	
3,481	-	-	123,692	3,490	-	-	24,000	
3,482	\$60,000	-	100,000	3,491	_	-	1,200	
3,483	-	~	6,180	3,492	-	-	10,000	
3,484	-	-	50,000	3,493	-	- 1	12,600	
3,485	-	-	12,000	3,494	201,000	156,600	206,977	

RECAPITULATION BY INDUSTRIES. ESTABLISHMENTS.

[This recapitulation relates to the 3,494 establishments which made returns of value of product for one or more of the three years considered; on the basis of value of product, it shows the respective number of establishments indicating an increase, a decrease, no change in value of product, or no return of value of product.]

1889	AS COMPA	RED WITH	1888		1889 A	S COMPA	RED WITH	1887		
Increase	Decrease	No change	Not given	Total	Increase	De- crease	No change	Not given	Total	
6	2	-	_	8	5	3	_	_	8	1
9	4	-	-	13	10	3	-	-	13	2
19	3	1	4	27	20	2	1	4	27	3
4	-	-	-	4	4	_	_	-	4	4
410	131	22	62	625	456	101	6	62	625	5
97	10	1	1	109	97	10	1	1	109	6
39	-	-	-	39	39	-	-	-	39	7
22	-	-	-	22	22	-	-	-	22	8
7	1	-	-	8	8	-	-	_	8	9
11	3	-	-	14	12	2	-	-	14	10
14	-	-	2	16	13	1	-	2	16	11
56	7	1	4	68	56	8	-	4	68	12
5	-	-	-	5	5	_	_	-	5	13
5	2	-	-	7	5	2	-	-	7	14
6	1	-	1	8	5	2	-	1	8	15
86	25	3	7	121	90	22	2	7	121	16
34	1	-	-	35	34	1	-	-	35	17
20	6	-	-	26	24	1	1	-	26	18
4	-	-	-	4	4	-	-	-	4	19
113	49	2	9	173	131	31	2	9	173	20
1	2	-	-	3	2	1	-	-	3	21
4	-	-	-	4	4	-	-	-	4	22
15	- 1	-	-	15	15	-	I	-	15	23
7	-	-	-	7	7	-	-	-	7	24
4	-	-	-	4	4	-	-	-	4	25
6	-	-	-	6	6	-	-	-	6	26
10	-	-	-	10	10	-	-	-	10	27
11	-	- 1	-	11	10	1	-	-	11	28
7	-	-	-	7	7	-	-	-	7	29
3	-	1	2	6	4	-	-	2	6	30

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued. RECAPITULATION BY INDUSTRIES. ESTABLISHMENTS-Concluded.

	·	1888	AS COMPA	RED WITH	1887	
,	Industries.	Increase	Decrease	No change	Not given	Total
1	Fine arts and taxidermy,	_	_	_	3	3
2	Fireworks and matches,	_	-	_	3	3
3	Flax, hemp, and jute goods,	5	- 1		2	7
4.	Food preparations,	64	12	6	162	244
5	Furniture,	25	22	2	81	130
6	Glass	3	3	_	4	10
7	Glue, isinglass, and starch,	_	_		13	13
8	Hair work (animal and human),	_	_	-	4	4
9	Hose: rubber, linen, etc.,	1	_	_	4	5
10	Hosiery and knit goods,	s	6	_	26	40
11	Ink, mucilage, and paste,	_	_	_	7	7
12	Ivory, bone, shell, and horn goods, etc.,	_	_	_	12	12
13	Jewelry burnishing and lapidary work,	_	_	_	2	2
14	Leather,	62	42	3	66	173
15	Linen,	1	2	_	_	3
16	Liquors and beverages (not spirituous), .	_	_	_	6	. 6
17	Liquors: malt, distilled, and fermented, .	16	7	2	16	41
18	Lumber,	1	1	_	21	23
19	Machines and machinery,	61	24	1	109	195
20	Metals and metallic goods,	84	45	4	173	306
21	Mixed textiles,	7	5	1	7	20
22	Models and patterns,	_	_	_	7	7
23	Musical instruments and materials,	13	11	-	21	45
24	Oils and illuminating fluids,	_	1	_	10	11
25	Paints, colors, and crude chemicals,	-	_	_	16	16
26	Paper and paper goods,	63	9	3	25	100
27	Perfumes, toilet articles, etc.,	_	-	_	1	1
28	Photographs and photographic materials,	_	_	-	7	7
29	Polishes and dressing,	_	_	_	16	16
30	Printing, publishing, and bookbinding, .	_	-	-	20	20
31	Print works, dye works, and bleacheries,	9	9	-	7	25
32	Railroad construction and equipment, .	1	-	-	7	8
33	Rubber and elastic goods,	.11	12	2	14	39
34	Scientific instruments and appliances, .	_	-	-	14	14
35	Shipbuilding,	5	1	-	29	35
36	Silk and silk goods,	4	4	- 1	4	12
37	Sporting and athletic goods,	_	-	~	7	7
38	Stone,	15	6	1	50	72
39	Straw and palm leaf goods,	13	9	1	2	25
40	Tallow, candles, soap, and grease,	11	2	~	29	42
41	Tobacco, snuff, and cigars,	-	-		41	41
42	Toys and games (children's),	-	-	-	9	9
43	Trunks and valises,	-	-	-	8	8
44	Whips, lashes, and stocks,	1	_ [-	12	13
45	Wooden goods,	9	9	3	74	95
46	Woollen goods,	64	35	-	53	152
47	Worsted goods,	10	8	-	4	22
48	ALL INDUSTRIES,	988	475	57	1,974	3,494

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued. RECAPITULATION BY INDUSTRIES. ESTABLISHMENTS-Concluded.

								(
		1887	RED WITH	S COMPA	1889 A		1888	RED WITH	AS COMPA	1889
al	Total	Not given	No change	De- crease	Increase	Total	Not given	No change	Decrease	Increase
3	3	_	· _	-	3	3	_	-	_	3
3	3	-	_	-	3	3	-	-	_	3
7	7	2	-	1	4	7	2	_	2	3
14	244	14	3	22	205	244	14	4	34	192
30	130	7	3	22	98	130	7	7	16	100
0.0	10	1	-	3	6	° 10	1	-	3	6
13	13	-	-	-	13	· 13	-	·-	-	13
4	4	-	-	-	° 4	4	-	-	-	4
5	5	_	-		5	5	-	-	1	4
0 1	40	8	-	6	26	40	8	-	6	26
7 1	7	-	-	-	7	7	_	-	-	7
2 1	12	-	-	-	12	12	_	-	-	12
2 1	2	-	-		2	2	_		-	2
3 1	173	18	1	46	108	173	18	2	52	101
3 1	3	_	-	2	1	3	_	_	3	-
6 1	6	_	-		6	6	_	_	-	6
1 1	41	3	1	10	27	41	3	1	11	26
23 1	23	1	_	1	21	23	1	-	1	21
5 1	195	9	1	21	164	195	9	4	29	153
06 2	306	19	-	34	253	306	19	1	51	235
20 2	20	.3	-	8	9	20	3	1	6	10
7 2	7	_	_	-	7	7	_	_	-	7
15 2	45	2	_	8	35	45	2	2	5	36
11 2	11	2	-	1	8	11	2	_	1	8
16 2	16	_	_	_	16	16	_	_	_	16
00 2	100	12	_	13	75	100	12	_	22	66
1 2	1	-	_	_	1	1	-	_	_	1
7 2	7	_	_	_	7	7	_	_	_	7
16 2	16	_	-	_	16	16	_	_	-	16
20 3	20	_	_	_	20	20	-	_	_	20
25 3	25	3	_	8	14	25	3	_	6	16
8 3	s	_	-	_	s	8	_	_	-	s
39 3	39	6	_	9	24	39	6	_	8	25
14 3	14	-	_	-	14	14	_	_	-	14
35 3	35	1	_	-	34	35	1	1	2	31
12 3	12	2	-	2	8	12	2	_	3	7
7 3	7	-	-	-	7	7	_	-	-	7
2 3	72	4	-	7	61	72	4	1	12	55
25 3	25	8	_	9	s	25	8	1	10	6
12 4	42	-	1	-	41	42	_	-	2	40
11 4	41	-	-	-	41	41	_	-	-	41
9 4	9	-	_	-	9	9	_	-	_	9
8 4	s	_	-	-	8	8	_	-	_	S
t3 4	13	-		-	13	13	_	-	1	12
5 4	95	2	-	7	86	95	2	1	7	85
52 4	152	19	-	31	102	152	19	5	30	98
22 4	22	2	-	6	14	22	2	1	4	15
94 4	3,494	240	23	468	2,763	3,494	240	63	575	2,616

COMPARATIVE PRODUCT: BY ESTABLISHMENTS—Continued. RECAPITULATION BY INDUSTRIES. INCREASE OR DECREASE.

[This recapitulation includes returns from 1,075 establishments which reported the value of product for each of the three years, — 1887, 1888, and 1889. The relative increase or decrease in value of product is given, with equivalent percentages.]

		Number of	VALUE OF G	OODS MADE
	Industries.	Estab- lishments Considered	1887	1888
1	Agricultural implements,	4	\$1,065,850	\$1,109,435
2	Arms and ammunition,	°s	1,439,629	1,309,268
3	Artisans' tools,	8	1,047,066	1,240,443
4	Boots and shoes,	213	43,163,103	44,720,693
5	Boxes (paper and wooden),	17	1,312,939	1,348,953
6	Buttons and dress trimmings,	3	188,399	192,957
7	Carpetings,	1	4,464,529	4,406,446
8	Carriages and wagons,	13	1,190,709	1,428,402
9	Chemical preparations (compounded),	2	93,714	88,722
0	Clocks and watches,	2	506,995	457,666
1	Clothing,	38	11,560,840	11,913,910
2	Cooking, lighting, and heating apparatus, .	1	75,753	75,000
3	Cordage and twine,	11	5,167,401	6,632,889
4	Cotton goods,	129	72,668,689	77,807,716
= 5	Cotton, woollen, and other textiles,	2	3,032,734	3,258,241
6	Dyestuffs,	1	124,000	127,000
7	Emery and sand paper and cloth, etc., .	1	53,843	47,720
8	Flax, hemp, and jute goods,	3	1,209,771	1,434,539
9	Food preparations,	55	17,281,631	19,648,96
0			4,453,385	4,401,98
	1	4	494,984	462,339
1	Glass,		357,000	550,000
2	Hose: rubber, linen, etc.,		3,535,851	3,225,730
3	Hosiery and knit goods,	66	11,691,014	10,686,10
1.5	Leather,	3	1,299,153	1,299,95
5	Linen,	20	, ,	4,284,320
6	Liquors: malt, distilled, and fermented,		3,517,904 36,700	23,50
27	Lumber,	-		
28	Machines and machinery,	65	11,141,798	11,470,275 $12,376,08$
29	Metals and metallic goods,	. 93	12,315,686	, ,
0	Mixed textiles,	- 1	2,288,751	1,942,52
1	Musical instruments and materials,	. 18	3,403,095	3,429,02
32	Oils and illuminating fluids,	. 1	305,580	263,76
33	Paper and paper goods,	. 51	12,915,035	14,131,49
1	Print works, dye works, and bleacheries,	15	16,288,884	14,123,86
5	Railroad construction and equipment, .	. 1	96,011	156,74
36	Rubber and elastic goods,	. 17	8,698,300	8,797,00
37	(p	4	554,714	779,03
38	Silk and silk goods,	. 6	3,863,066	3,840,00
39	Stone,	. 12	1,087,892	1,094,25
10	Straw and palm leaf goods,	. 13	2,558,957	2,527,84
1		. 11	1,583,806	1,725,51
12	Wooden goods,	. 15	1,538,870	1,365,87
13	Woollen goods,	. 71	23,419,640	23,384,08
14	Worsted goods,	. 15	6,488,352	6,595,21
15	ALL INDUSTRIES,	. 1,075	\$299,582,023	\$310,185,49

COMPARATIVE PRODUCT: BY ESTABLISHMENTS—Continued. RECAPITULATION BY INDUSTRIES. INCREASE OR DECREASE.

[This recapitulation includes returns from 1,075 establishments which reported the value of product for each of the three years,—1887, 1888, and 1889. The relative increase or decrease in value of product is given, with equivalent percentages.]

VALUE OF GOODS MADE	Increase (+), or I	Decrease (—), in —	Percentages or Decr	of Increase ease in —	
1889	as compared with	as compared with	1888 as compared with 1887	1889 as compared with 1888	
\$1,075,738	+\$43,585	-\$33,697	+4.09	-3.04	1
1,228,011	-130,361	81,257	-9.06	-6.21	2
1,270,329	+193,377	+29,886	+18.47	+2.41	3
45,574,650	+1,557,590	+853,957	+3.61	+1.91	4
1,360,162	+36,014	+11,209	+2.74	+0.83	5
180,787	+4,558	-12,170	+2.42	-6.31	6
4,752,760	-58,083	+346,314	-1.30	+7.86	7
1,173,174	+237,693	-255,228	+19.96	-17.87	8
75,491	-4,992	-13,231	-5.33	-14.91	9
490,956	-49,329	+33,290	-9.73	+7.27	10
11,632,868	+353,070	-281,042	+3.05	-2.36	11
50,850	-753	-24,150	-0.99	-32.20	12
8,198,531	+1,465,488	+1,565,642	+28.36	+23.60	13
80,811,278	+5,139,027	+3,003,562	+7.07	+3.86	14
2,970,890	+225,507	-287,351	+7.44	_8.S2	15
135,000	+3,000	+8,000	+2.42	+6.30	16
50,819	-6,123	+3,099	-11.37	+6.49	17
1,393,477	+224,768	-41,062	+18.58	-2.86	18
18,742,064	+2,367,336	-906,903	+13.70	-4.62	19
4,303,591	-51,397	-98,397	-1.15	-2.24	20
516,219	-32,645	+53,880	-6.60	+11.65	21
458,000	+193,000	-92,000	+54.06	-16.73	22
2,738,013	-310,121	-487,717	_8.77	-15.12	23
9,903,717	-1,004,907	—782,390	-8.60	—7. 32	24
1,191,446	+798	-108,505	+0.06	-8.35	25
3,877,364	+766,416	-406,956	+21.79	-9.50	26
14,730	-13,200	_8,770	-35.97	-37.32	27
13,051,480	+328,474	+1,581,208	+2.95	+13.79	28
13,348,840	+60,401	+972,753	+0.49	+7.86	29
1,782,280	-346,230	-160,241	-15.13	-8.25	30
3,734,043	+25,934	+305,014	+0.76	+8.90	31
256,000	-41,820	—7,76 0	-13.69	-2.94	32
14,643,568	+1,216,457	+512,076	+9.42	+3.62	33
14,455,476	-2,165,024	`` + 331,616	-13.29	+2.35	34
166,356	+60,734	+9,611	+63.26	+6.13	35
9,705,700	+98,707	+908,693	+1.13	+10.33	36
795,000	+224,318	+15,968	+40.44	+2.05	37
4,288,297	-23,061	+448,292	-0.60	+11.67	38
1,052,759	+6,365	-41,498	+0.59	-3.79	39
2,253,642	-31,117	-274,198	-1.22	-10.85	40
1,933,194	+141,706	+207,682	+\$.95	+12.04	41
1,319,732	-172,996	-46,142	-11.24	-3.38	42
23,954,108	-35,556	+570,024	-0.15	+2.44	43
6,963,561	+106,863	+368,346	+1.65	+5.59	44
\$317,874,951	+\$10,603,471	+\$7,689,457	+3.54	+2.48	45

COMPARATIVE PRODUCT: BY ESTABLISHMENTS—Continued.

COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS. FIVE YEARS, 1885—1889.

[The figures given under "Value of Goods Made" in this presentation represent the returns made by the same establishments, in each industry, for each of the five years, —1885, 1886, 1887, 1888, and 1889, the whole number of establishments considered, in all industries, being 895. The table allows of comparisons being made, as regards the value of product, between any two years of the five years for which figures are given. The relative increase or decrease in the value of product in 1886 as compared with 1885, in 1887 as compared with 1886, in 1888 as compared with 1887, and in 1889 as compared with 1888, is given, with equivalent percentages.]

	:	Indus	STRIES	3, AND	YEA	RS.			Number of Estab- lishments Con- sidered	Value of Goods Made	Increase (+), or Decrease (-), as Compared with Previous Year	Percent- ages
	A	gricu	iltura	l Imp	olem	ents						
1885,									4	\$911,416	_	_
1886,									4	988,987	+\$77,571	+8.51
1887,									4	1,065,850	+76,863	+7.77
1888,									4	1,109,435	+43,585	+4.09
1889,									4	1,075,738	-33,697	-3.04
	A	trms	and	$_{1mm}$	unit	ion.			1			
1885,									8	\$1,237,174	_	_
1886,	·								8	1,285,717	+\$48,543	+3.92
1887,	Ċ								8	1,439,629	+153,912	+11.97
1888,									8	1,309,268	-130,361	-9.06
1889,									8	1,228,011	-81,257	-6.21
·				is' To	7 .							
1885,		217	1118(11)	18 10	1005.				6	\$621,541	_	_
1886,	•	•	•	•	•	•	•	•	6	663,594	+\$42,053	+6.77
1887,	•	•	٠	•	•	•	•	•	6	706,354	+42,760	+6.44
1888,	•	•	•	•	•	•	•		6	767,453	+61,099	+8.65
1889.	•	•	•	•	•	٠	•	•	6	829,206	+61,753	+8.05
1 000,	٠					•	•	•		,		7
1885,		Bo	ots a	nd S	hoes.	•			172	\$99.179.101 °		
1886,	٠	•		•	•	•	•	•	172	\$33,173,491 37,337,931	+\$4,164,440	+12.55
1887,	•	•	•	•	•	•	•	•	172	37,319,862	—18,069	-0.05
1888,	•	•	•	•	•	•	•	•	172	38,893,486	+1,573,624	+4.22
1889,	•	•	•	•	•		•	•	172	39,772,596	+879,110	+2.26
1002,		•		•	•	•		•	112	00,112,000	0.0,110	1 2.20
	Box	ces (Puper	and and	Woo	oden).					
1885,	٠	•	•	•	٠	٠	•	٠	11	\$716,143	-	-
1886,	•	•	•	•	٠	٠	•	•	11	826,407	十\$110,264	+15.40
1887,	•	•	•	•	•	٠	•	٠	11	815,722	-10,685	-1.29
1888,	•	•	•	•	•	٠	•	•	11	844,279	+28,557	+3.50
1889,	•	•	•	•	•	•	•	•	11	851,243	+6,964	+0.82
			Carp	eting	8.				1			
1885,							•	•	2	\$2,319,009	-	-
1886,				٠		•	•		2	2,814,830	+\$495,821	+21.38
1887,	٠							٠	2	3,010,324	+195,494	+6.95
1888,					٠,		•	•	2	2,899,988	—110,336	-3.67
1889,					•				2	3,086,856	+186,868	+6.44
	0	arri	uges	and 1	Vago	ns.						
1885,									10	\$705,953	_	-
1886,									10	728,688	+\$22,735	+3.22

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Continued. COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS. FIVE YEARS, 1885—1889—Continued.

	1	[NDUS	TRIES	s, ani	YE.	ARS.			Number of Estab- lishments Con- sidered	Value of Goods Made	Increase (+), or Decrease (-), as Compared with Previous Year	Percent- ages
	Gari	riage.	s and	l Wa	gons	-c	on.					
1887,				. `					10	\$781,934	+\$53,246	+7.31
1888,									10	801,144	+19,210	+2.46
1889,									10	721,674	-79,470	-9.92
Chem	ica.	l. Pre	nara	tions	(Co	mno	unde	a).				
1885,									2	\$74,808	_	
1886,									2	96,696	+\$21,888	+29.26
1887,									2	93,714	-2,982	-3.08
1888,									2	88,722	-4,992	-5.33
1889,									2	75,491	-13,231	-14.91
·		Class	le as	id W	atch	0.0						
1885,		Cioc	ns u1	ice m	accn				2	\$333,000		_
1886,	•	Ċ	Ċ	·			·	Ċ	2	452,368	+\$119,368	+35.85
1887,	Ĭ							Ċ	2	506,995	+54,627	+12.08
1888,									2	457,666	-49,329	-9.73
1889,									2	490,956	+33,290	+7.27
,			Cla	thing						,	, ,	
1885,				• <i>neng</i>	٠.				27	\$5,849,372	_	_
1886,									27	6,886,276	+\$1,036,904	+17.73
1887,									27	7,477,019	+590,743	+8.58
1888,									27	7,811,352	+334,333	+4.47
1889,									27	8,047,657	+236,305	+3.03
		Core	lage	and:	Tunin	e.						
1885,									7	\$2,472,476	_	_
1886,									7	2,981,421	+\$508,945	+20.58
1887,									7	3,141,146	+159,725	+5.36
1888,									7	3,959,992	+818,846	+26.07
1889,									7	4,149,212	+189,220	+4.78
		(ottor	ı Goo	als.							
1885,									107	\$54,316,241	-	_
1886,									107	61,381,402	+\$7,065,161	+13.01
1887,									107	66,640,987	+5,259,585	+8.57
1888,									107	71,017,470	+4,376,483	+6.57
1889,	•								107	74,070,975	+3,053,505	+4.30
Cott	on,	Wood	llen,	and (Other	r Tes	ctiles					
1885,									2	\$3,384,981	_	_
1886,									2	3,139,626	-\$245,355	-7.25
1887,									2	3,032,734	-106,892	-3.40
1888,									2	3,258,241	+225,507	+7.44
1889,									2	2,970,890	-287,351	-8.82
4	Fla.	v, He	mp , ϵ	ind.	Tute	Good	ls.					
1885,									3	81,154,741	_	_
1886,									3	1,181,102	+\$26,361	+2.28
1887,								.	3	1,209,771	+28,669	+2.43
1888,									3	1,431,589	+224,768	+18.58
									3	1,393,477	-41,062	-2.86

${\tt COMPARATIVE\ PRODUCT:\ BY\ ESTABLISHMENTS-Continued.}$

COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS. FIVE YEARS, 1885—1889—Continued.

	1	[NDUS	TRIES	5, ANI	YE.	ARS.			Number of Estab- lishmeuts Con- sidered	Value of Goods Made	Increase (+), or Decrease (-), as Compared with Previous Year	Percent- ages
		Foo	d Pr	epar	ation	v.						
1885,									49	\$9,640,323	_	_
1886,									49	10,136,257	+\$495,934	+5.14
1887,									49	11,173,663	+1,037,406	+10.23
1888,									49	12,674,770	+1,501,107	+13.43
1889,									49	12,395,545	-279,235	-2.20
			Fur	nitur	٠.							
1885,			1 (1)						34	\$3,817.041	_	_
1886,	Ĭ.		Ċ	Ċ		Ĭ.			34	3,570,223	-\$246,818	-6.47
1887,	·	i		Ċ	Ċ	Ċ	Ċ	Ċ	34	4,166,680	+596,457	+16.71
1888,	Ċ				·	Ċ			34	4,124,988	-41,692	-1.00
1889,	Ċ	Ċ			Ċ			·	34	4,050,591	-74,397	-1.80
,	•	·		lass.	•		-	·		4,000,004	11,001	1.00
1885,			(r	$\iota ass.$					3	0010 005		
1886,	•	•	•	•			•	•	3	\$318,635 305,709	-\$12,926	-4.06
1887,	•	•	•	•	•	•	•	•	3	337,352	+31,643	+10.35
1388,	•	•	•	•			•	•	3	316,483	-20,869	-6.19
1889,	٠	•	•		•	•	•	•	3	386,483	+70,000 +70,000	+22.12
1002,	٠,	·	•					•	0	550,455	770,000	7-2-12
1885,	11	108167	y and	a An	it Gre	ous.			6	\$1,422,600		
1886,	٠	•	•	•	•	٠	٠	•	6	2,291,864	+\$869,264	+61.10
1887,		•	•	•	•	•	•		6	2,291,304	+579,262	+25.27
1888,	•	•	•	•	•	•	•	Ċ	6	2,293,173	-577,953	-20.13
1889,	•	•	•	•	•	•	•	•	6	1,940,570	-352,603	-15.38
,	•	•			•	·	•	Ť		1,540,010	002,000	10.00
1005			Lee	uther	•					*** **** ***		
1885,	•	•	•	•	٠		•	•	55	\$9,788,403	- 1 2100 540	
1886,	•	•	•			•	•	•	55	9,986,971	+\$198,568	+2.03
1887,	٠	•	•	٠	٠	٠	•	٠	55	9,652,122	-334,849	-3.35
1888,	•				•	•	٠	•	55	8,690,956	-961,166	-9.96
1889,	•			•	•	•	•		55	7,913,354	—777, 602	—8.95
			Li	nen.								
1885,	٠		٠	٠		٠	٠		3	\$1,068,489	-	-
1886,	٠		٠				٠		3	1,228,311	+\$159,822	+14.96
1887,	٠			•		•		.	3	1,299,153	+70,842	+5.77
1888,	٠	•	٠	٠	٠		٠	٠	3	1,299,951	+798	+0.06
1889,	•	•	•	٠	٠	٠	•	.	3	1,191,446	-108,505	-8.35
Liq	juor	's: J1	alt, i	Distinuted.		and	Fer-					
1885,									17	\$3,283,356	_	_
1886,									17	3,303,520	+\$20,164	+0.61
1887,									17	2,993,741	-309,779	-9.38
1888,									17	3,688,986	+695,245	+23.22
1889,									17	3,321,822	-367,164	-9.95
	M	achin	es ar	ud M	uchi	ieru.						
1885,									55	\$6,822,596	_	_
1886,									55	9,224,680	+\$2,402,084	+35.21

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued. COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS. FIVE YEARS, 1885-1889-Continued.

-	-											
		Indus	STRIE:	s, AN	ть Үе	ARS.			Number of Estab- lishments Con- sidered	Value of Goods Made	Increase (+), or Decrease (-), as Compared with Previous Year	Percent- ages
`.J.	[ac]	ines	and.	Maci	hiner	y —	Con.					
1887,									55	\$9,918,464	+\$693,784	+7.52
1888,									55	10,201,333	+282,869	+2.85
1889,									55	11,716,781	+1,515,448	+14.86
	1/0	tals c	m./ :	Vota	llic 6	loods	,					
1885,		ottos t	crece 1	11 6 5 66 6	iii c	ooae	•		87	\$9,953,533		
1886,		•	•	•	•	•	•	Ċ	87	11,424,376	+\$1,470,843	+14.78
1887,	•	•	•	•				·	87	11,866,602	+442,226	+3.87
1888,		•	•	•	·	•	·		87	11,855,896	-10,706	-0.09
1889,	•	•	•	•	•	•	•	·	87	12,758,431	+902,535	+7.61
2000,	•					•	•	·	01	12,100,101	1 002,000	11.01
1885,			Tixea	l Tex	tiles.				9	\$1,915,706	_	
1886,		•					•		9	2,126,815	+\$211,109	+11.02
1887,									9	2,240,554	+113,739	+5.95
1888.	•	•	•	•	•	•	•	•	9	1,889,617	-350,937	-15.66
1889,		·	Ċ		·	•	·	•		2,384,279	+494,662	+26.18
,					٠,					2,001,210	102,002	, 23723
	sica	l Ins	trum	ents	and	Mat	eria	8.		40.407.040		
1885,	•	•	•	٠		•	•	•	14	\$2,462,042	1.2700.700	1 = -0
1886,	٠	•	•				•	•	14	2,648,230	+\$186,188	+7.50
1887,	•					•			14	2,834,680	+186,450	+7.04
1888,			•			•	•	•	14	2,896,929	+62,249	+2.20
1889,	٠					•		-	14	3,213,112	+316,183	+10.91
	P	aper	and	Pap	er G	oods						
1885,									46	\$11,010,073	1.0001.055	1 0 10
1886,		,							46	11,691,348	+\$681,275	+6.19
1887,									46	11,796,954	+105,606	+0.90
1888,									46	12,850,377	+1,053,423	+8.93
1889,					•		•		46	13,049,812	+199,435	+1.55
F	rin	t Wo	rks, Blea			ès, α	nd					
1885,									13	\$8,353,128	- '	-
1886,									13	13,691,973	+\$5,338,845	+63.91
1887,									/ 13	14,943,968	+1,251,995	+9.14
1888,									13	13,827,860	-1,116,108	-7.47
1889,									13	14,153,347	+325,487	+2.35
	Ru	bber	and	Elas	stic (700d	8.					
1885,									13	\$3,146,717	-	_
1886,									13	4,133,835	+\$987,148	+31.37
1887,									13	4,694,714	+560,849	+13.57
1888,									13	4,096,445	-598,269	-12.74
1889,									13	4,258,828	+162,383	+3.96
.,		C:12-	7	C12.7.7.	Co	.7.			-	, , , - ,		
1885,		Silk.	and.	Silk.	God	us.			6	\$2,951,253	_	_
1886,									6	3,467,911	+\$516,658	+17.51
1887,									6	3,863,066	+395,155	+11.39
1888,									6	3,840,005	-23,061	-0.60
1889,									6	4,288,297	+48,292	+11.67
,									Ü	-,,	,,	,

COMPARATIVE PRODUCT: BY ESTABLISHMENTS — Continued. COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS.

FIVE YEARS, 1885—1889—Continued.

	1	NDUS	TRIES	, ANI	о Үел	ARS.			Number of Estab- lishments Con- sidered	Value of Goods Made	Increase (+), or Decrease (-), as Compared with Previous Year	Percent- ages
			St	one.								
1885,									12	\$954,775 .	_	-
1886,									12	883,936	-\$70,839	-7.42
1887,									12	1,087,892	+203,956	+23.07
1888,	Ċ			Ċ					12	1,094,257	+6,365	+0.59
1889,		·		Ċ	Ċ	Ċ			12	1,052,759	-41,498	-3.79
	ov.			,	T	<i>a</i> -	7.			, ,		
	sira	w un	u P	um	Leaj	troc	ous.		10	Ø1 011 101		
1885,	•	•	٠	•	•	•	•	•	12	\$1,811,401	1 0150 051	100.00
1886,	•	•	•	•	•		•	٠	12	2,287,752	+\$476,351	+26.30
1887,	•	•				٠	•	٠	12	2,371,491	+83,739	+3.66
1888,	0	•	٠		•	•		٠	12	2,280,231	—91,260	-3.85
1889,	•	•	•	•	•	•		•	12	2,004,505	-275,726	-12.09
Tal	low,	Can	ales,	Soa	p, a	nd (Greas	e.				
1885,									11	\$1,732,240	_	-
1886,									11	1,655,302	-\$76,938	-4.44
1887,									11	1,583,806	-71,496	-4.32
1888,									11	1,725,512	+141,706	+8.95
1889,									11	1,933,194	+207,682	+12.04
		717	ooder	. C	0.70							
1885,		**	ooue	i Gr	was.				13	\$1,218,091		
1886,	•	•	•	•	•	•	•	•	13		+\$45,188	+3.71
1887,	•			•	•	•	•	•		1,263,279		
,	•	•	•	•	•	•	•	•	13	1,399,769	+136,490	+10.80 -12.35
1888,	•	•	•	•	•	•	•	٠	13	1,226,867	-172,902	-8.55
1889,	•		•	•	•	•		:	13	1,121,934	-104,933	-5.55
		11,	oolle	n G	oods.							
1885,	•							•	62	\$16,400,949	-	-
1886,				-					62	17,917,554	+\$1,516,605	+9.25
1887,	٠							٠	62	19,155,050	+1,237,496	+6.91
1888,									62	19,376,716	+221,666	+1.16
1889,									62	20,086,019	+709,303	+3.66
		H	orste	d G	oods.							
1885,									12	\$4,999,510	_	_
1886,									12	5,714,210	+\$714,700	+14.30
1887,									12	5,716,423	+2,213	+0.04
1888,									12	5,815,878	+99,455	+1.74
1889,	Ċ	·		Ċ	Ċ	Ċ	Ċ	·	12	6,147,873	+331,995	+5.71
,	Ť	•	•		·	·	·	·		0,111,010	1 332,000	, , , , ,
		AL	L INI	DUST	RIES							
1885,									895	\$210,341,207	_	
1886,								·	895	239,719,121	+\$29,377,914	+13.97
1887,									895	253,109,311	+13,390,190	+5.59
1888,									895	260,722,265	+7,612,954	+3.01
1889,									895	268,132,964	+7,410,699	+2.84
,	•	•		•	•	•	•	•	350	200,102,004	1,,110,000	1 2.04

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Continued.

COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS. FIVE YEARS, 1885—1889—Concluded.

RECAPITULATION.

[This recapitulation includes returns from those establishments, in each industry, which reported the value of product for each of the five years,—1885, 1886, 1887, 1888, and 1889, the whole number of establishments considered, in all industries, being 895. The relative increase or decrease in the value of goods made is based upon the figures returned for the two years, 1885 and 1889, only.]

Industries.	Number of Estab- lishments		GOODS MADE	Increase (+), or Decrease (-),	Percent
INDUSTRIES,	Con- sidered	1885	1889	in 1889	ages
Agricultural implements,	4	\$911,416	\$1,075,738	+\$164,322	+18.03
Arms and ammunition,	8	1,237,174	1,228,011	-9,163	-0.74
Artisaus' tools,	6	621,541	829,206	+207,665	+33.41
Boots and shoes,	172	33,173,491	39,772,596	+6,599,105	+19.89
Boxes (paper and wooden),	11	716,143	851,243	+135,100	+18.86
Carpetings,	2	2,319,009	3,086,856	+767,847	+33.1
Carriages and wagons,	10	705,953	721,674	+15,721	+2.2
Chemical preparations (com-					
pounded),	2	74,808	75,491	+683	+0.9
Clocks and watches,	2	333,000	490,956	+157,956	+47.4
Clothing,	27	5,849,372	8,047,657	+2,198,285	+37.5
Cordage and twine,	7	2,472,476	4,149,212	+1,676,736	+67.8
Cotton goods,	107	54,316,241	74,070,975	+19,754,734	+36.3
Cotton, woollen, and other textiles,	2	3,384,981	2,970,890	-414,091	-12.2
Flax, hemp, and jute goods,	3	1,154,741	1,393,477	+238,736	+20.6
Food preparations,	49	9,640,323	12,395,545	+2,755,222	+28.5
Furniture,	34	3,817,041	4,050,591	+233,550	+6.1
Glass,	3	318,635	386,483	+67,848	+21.2
Hosiery and knit goods,	6	1,422,600	1,940,570	+517,970	+36.4
Leather,	55	9,788,403	7,913,354	-1,875,049	-19.1
Linen,	3	1,068,489	1,191,446	+122,957	+11.5
Liquors: malt, distilled, and fer-					
mented,	17	3,283,356	3,321,822	+38,466	+1.1
Machines and machinery,	55	6,822,596	11,716,781	+4,894,185	+71.7
Metals and metallic goods,	87	9,953,533	12,758,431	+2,804,898	+28.1
Mixed textiles,	9	1,915,706	2,384,279	+468,573	+24.4
Musical instruments and materials,	14	2,462,042	3,213,112	+751,070	+30.5
Paper and paper goods,	46	11,010,073	13,049,812	+2,039,739	+18.5
Print works, dye works, and		, ,		1	
bleacheries,	13	8,353,128	14,153,347	+5,800,219	+69.4
Rubber and elastic goods,	13	3,146,717	4,258,828	+1,112,111	+35.8
Silk and silk goods,	6	2,951,253	4,288,297	+1,337,044	+45.30
Stone,	12	954,775	1,052,759	+97,984	+10.26
Straw and palm leaf goods, .	12	1,811,401	2,004,505	+193,104	+10.6
Tallow, candles, soap, and grease,	11	1,732,240	1,933,194	+200,954	+11.6
Wooden goods,	13	1,218,001	1,121,934	-96,157	-7.89
Woollen goods,	62	16,400,949	20,086,019	+3,685,070	+22.4
Worsted goods,	12	4,999,510	6,147,873	+1,148,363	+22.9
ALL INDUSTRIES,	895	\$210,341,207	\$268,132,964	+\$57,791,757	+27.4

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Continued.

COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS. 1885, 1889.

[This presentation shows those establishments, in each industry, which made a return of value of product in 1885 and 1889, the whole number of establishments considered, in all industries, being 2,780, and is more comprehensive than the recapitulation to the previous table, as it includes all those establishments which made return of value of product for each of the two years, 1885 and 1889, regardless of the fact as to whether they made a return for the intermediate years. The relative increase or decrease in the value of goods made in 1889, as compared with 1885, is also given with equivalent percentages.]

Industries.	Number of Estab- lishments	VALUE OF G	oods Made	Increase (+),	Percen
INDUSTRIES.	Con- sidered	1885	1889	Decrease (—), in 1889	ages
Agricultural implements,	8	\$1,042,666	\$1,330,188	+\$287,522	+27.5
Arms and ammunition,	13	1,810,732	1,881,306	+70,574	+3.9
Artisans' tools,	23	1,138,643	1,578,095	+439,452	+38.5
Awnings, tents, and decorations, .	4	67,875	51,810	-16,065	-23.6
Boots and shoes,	423	63,723,104	72,976,414	+9,253,310	+14.5
Boxes (paper and wooden),	86	2,951,163	3,585,969	+634,806	+21.5
Brick, tiles, and sewer pipe,	34	921,711	1,046,546	+124,835	+13.5
Brooms, brushes, and mops,	18	442,716	445,325	+2,609	+0.5
Burial cases, caskets, coffins, etc.,	6	375,245	351,941	-23,304	-6.2
Buttons and dress trimmings, .	10	770,687	639,992	-130,695	16.9
Carpetings,	10	5,382,959	6,662,552	+1,279,593	+23.7
Carriages and wagons,	63	2,893,593	3,128,940	+235,347	+8.1
Cement, kaolin, lime, and plaster,	4	73,305	156,150	+82,845	+113.0
Chemical preparations (com-					
pounded),	7	254,538	261,428	+6,890	+2.7
Clocks and watches,	5	394,600	539,856	+145,256	+36.8
Clothing,	104	15,982,492	20,696,083	+4,713,591	+29.4
Cooking, lighting, and heating		, ,		, , ,	
apparatus,	31	2,702,035	3,132,815	+430,780	+15.9
Cordage and twine,	18	4,230,222	8,866,261	+4,636,039	+109.8
Corks, bungs, and taps,	3	117,000	52,091	-64,909	-55.4
Cotton goods,	141	62,431,778	85,039,334	+22,607,556	+36.2
Cotton, woollen, and other textiles,	2	3,384,981	2,970,890	-414,091	-12.2
Crayons, pencils, crucibles, etc., .	2	44,910	32,241	-12,669	-28.2
Drugs and medicines,	15	2,449,056	2,462,501	+13,445	+0.8
Dyestuffs,	6	599,881	607,409	+7,528	+1.2
Earthen, plaster, and stone ware,	4	165,600	164,773	-827	-0.5
Electrical apparatus and appli-		,	,		
ances,	3	523,000	3,108,000	+2,585,000	+494.2
Electroplating,	8	97,707	83,310	-14,397	-14.7
Emery and sand paper and cloth, etc.,	9	450,600	796,304	+345,704	+76.7
Fancy articles,	6	63,512	84,787	+21,275	+33.5
Fertilizers,	4	172,400	143,400	-29,000	-16.8
Fine arts and taxidermy,	3	12,500	13,168	+668	+5.3
Fireworks and matches,	2	38,364	31,380	-6,984	-18.2
Flax, hemp, and jute goods, .	5	1,186,601	1,450,937	+264,336	+22.2
Food preparations,	222	48,037,376	51,318,219	+3,280,843	+6.8
Furniture,	115	7,267,552	7,953,945	+686,393	+9.4
Glass,	9	525,419	585,729	+60,310	+11.4
Glue, isinglass, and starch,	13	710,143	773,327	+63,184	+8.9
Hair work (animal and human), .	3	306,430	327,080	+20,650	+6.7
Hose: rubber, linen, etc.,	2	559,000	464,632	-94,368	-16.8

COMPARATIVE PRODUCT: BY ESTABLISHMENTS - Concluded. COMPARATIVE PRODUCT FOR SAME ESTABLISHMENTS. 1885, 1889 — Concluded.

	Number of Estab- lishments	VALUE OF C	GOODS MADE	Increase (+),	Percent
Industries.	Con- sidered	1885	1889	Decrease (—), in 1889	ages
Hosiery and knit goods,	17	\$2,134,579	\$3,653,588	+\$1,519,009	+71.10
Ink, mucilage, and paste,	6	121,212	89,570	-31,642	-26.10
Ivory, bone, shell, and horn goods,		,			
etc.,	11	622,127	877,369	+255,242	+41.0
Jewelry burnishing and lapidary					·
work,	2	6,000	7,000	+1,000	+16.6
Leather,	136	17,165,518	16,692,353	-473,165	-2.7
Linen,	3	1,068,489	1,191,446	+122,957	+11.5
Liquors and beverages (not spirit-					
uous),	6	223,858	238,241	+14,383	+6.4
Liquors: malt, distilled, and fer-		,			
mented,	35	5,215,838	6,103,004	+887,166	+17.0
Lumber,	20	1,448,963	1,783,681	+334,718	+23.1
Machines and machinery,	158	13,333,361	23,194,744	+9,861,383	+73.9
Metals and metallic goods,	262	24,949,830	31,471,223	+6,521,393	+26.1
Mixed textiles,	13	2,214,684	2,819,872	- 1-605,188	+27.3
Models and patterns,	7	75,255	281,413	+206,158	+273.9
Musical instruments and materials,	36	3,872,615	4,905,744	+1,033,129	+26.6
Oils and illuminating fluids,	9	1,468,856	1,246,819	-222,037	-15.1
Paints, colors, and crude chemicals,	11	652,027	728,880	+76,853	+11.7
Paper and paper goods,	84	16,966,699	29,347,857	+3,381,158	+19.9
Perfumes, toilet articles, etc.,	1	10,000	19,000	+9,000	+90.0
Photographs and photographic		,		1 2	
materials,	7	214,722	253,392	+38,670	+18.0
Polishes and dressing,	15	1,024,384	1,194,349	+169,965	+16.5
Printing, publishing, and book-			, ,		
binding,	10	366,042	392,784	+26,742	+7.3
Print works, dye works, and					
bleacheries,	19	9,802,678	14,895,532	+5,092,854	+51.9
Railroad construction and equip-					
ment,	6	998,835	2,990,489	+1,991,654	+199.4
Rubber and elastic goods,	23	9,126,385	15,189,835	+6,063,450	+66.4
Scientific instruments and appli-			, ,		
ances,	12	1,003,666	1,128,624	+124,958	+12.4
Shipbuilding,	33	1,266,122	1,539,136	+273,014	+21.5
Silk and silk goods,	7	3,135,253	4,536,297	+1,401,044	+44.6
Sporting and athletic goods,	6	185,890	175,005	-10,885	-5.8
Stone,	67	3,227,788	2,954,345	-273,443	-8.4
Straw and palm leaf goods,	17	2,944,807	2,850,263	-94,544	-3.2
Tallow, candles, soap, and grease,	39	3,078,650	3,138,276	+59,626	+1.9
Tobacco, snuff, and cigars,	38	1,470,716	2,024,593	+554,177	+37.6
Toys and games (children's), .	8	294,207	467,097	+172,890	+58.7
Trunks and valises,	7	210,000	196,077	-13,923	-6.6
Whips, lashes, and stocks,	9	624,200	688,264	+64,064	+10.2
Wooden goods,	74	3,442,083	3,583,116	+141,033	+4.1
Woollen goods,	108	25,136,120	29,345,740	+4,209,620	+16.7
Worsted goods,	14	7,358,085	10,155,800	+2,797,715	+38.0



1888, 1889.

1888.

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	Industries.	Number of Estab-	Number		Partners	
_	And of the same	lishments Considered	Private Firms	Males	Females	Total
1234567891011123145617819221223245262783333453637839	Agricultural implements, . Arms and ammunition, Artisans' tools, Boots and shoes. Boxes (paper and wooden), Burial cases, easkets, coffins, etc., Buttons and dress trimmings, Carpetings, Carriages and wagons, Chemical preparations (compounded), Clocks and watches, Clothing, Cooking, lighting, and heating apparatus, Cordage and twine, Cotton goods, Cottou, woollen, and other textiles, Dyestuffs, Emery and sand paper and cloth, etc., Fertilizers, Flax, hemp, and jute goods, Food preparations, Furniture, Glass, Hose: rubber, linen, etc., Hosiery and knit goods, Leather, Linen, Liquors: malt, distilled, and fermented, Lumber, Machines and machinery, Metals and metallic goods, Mixed textiles, Musical instruments and materials, Oils and illuminating fluids, Paper and paper goods, Print works, dye works, and bleacheries, Railroad construction and equipment, Rubber and elastic goods,			Males	Females	Total
40 41 42 43 44 45	Silk and silk goods, Stone, Straw and palm leaf goods, Tallow, candles, soap, aud grease, Whips, lashes, and stocks, Wooden goods,	7 19 16 13 1	2 13 15 11 - 13	5 30 34 2 23 - 20	- 1 - - 1	5 30 35 23 - 21
46 47	Woollen goods,	86 16	.9	8 107 17		107
48	ALL INDUSTRIES,	1,364	946	91,851	10 27	1,878

- 1 Includes 15 special partners.
- 3 Includes 3 special partners.
- 5 Includes 4 special partners.
- 7 Includes 5 special partners.
- 9 Includes 35 special partners and 4 estates.
- ² Includes 1 special partner.
- 4 Includes 1 special partner and 1 estate.
- 6 Includes 2 special partners.
- ⁸ Includes 1 special partner and 3 estates.
- 10 Includes 8 special partners.

1888.

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Number of		STOCE	THOLDERS		Aggregates:	
Corporations	Males	Females	Banks, Trustees, etc.	Total	and Stockholders	
5	57	17	-	74	74	1 1
3 5	32 213	3 1 33	4	39 346	50 853	:
11	126	133 46	-	172	70S	:
3	40	13	1	54	85	
	- 1	-	- 1	-	17 17	
24	11	-	-	11	17	
4	559 89	310 48		869 137	870 168	
	99	45		101	3	1
2 6 2 9	82	13	-	95	95	1
6	209	113	- 1	322	440	1
2	98	10	- 1	108	108	1
99	261 9,649	69 5,338	4 219	334 15,206	347 15,276	1.
1	* 288	ə,əəs * 145	219	*433	*436	1
-	-	-	_	-	1	1
2	7	-	-	7	7	1
1 8	-	=	-	21	23	2
8	14 87	7 7	_	. 94	220	2
6	223	92	1 -	315	401	2
6	47	4	-	51	53	2.
1	10	3	-	13	13	2
5	* 462	* 219	-	*681 50	*698 228	2
4	34 12	16 15	- 1	* 28	33	2
5 4 2 2 - 47	29	$\frac{13}{2}$		31	67	2
_	-	-	-	-	2	2
	707	266	-	973	1,051	3
48	816	409 10	-	1,225 41	1,375 50	3:
10	31 108	39		147	167	3
-	-	-	_	-	2	3.
41	621	301	-	922	984	3.
12	* 766	* 462	4	*1,232	*1,239	3
11	446	264	_	710	728	3
	33	7		40	44	39
2 5 6	137	22	-	159	164	40
6	126	30	-	156	186	4
1	3	4	-	7 8	42 31	4:
2	7 9	$\frac{1}{1}$	_	10	10	4.
4	68	4	1	73	94	43
25	* 631	* 272	-	*903	*1,010	44
7	127	35	-	162	179	4
418	16,164	8,216	234	24,614	26,492	45

1889.

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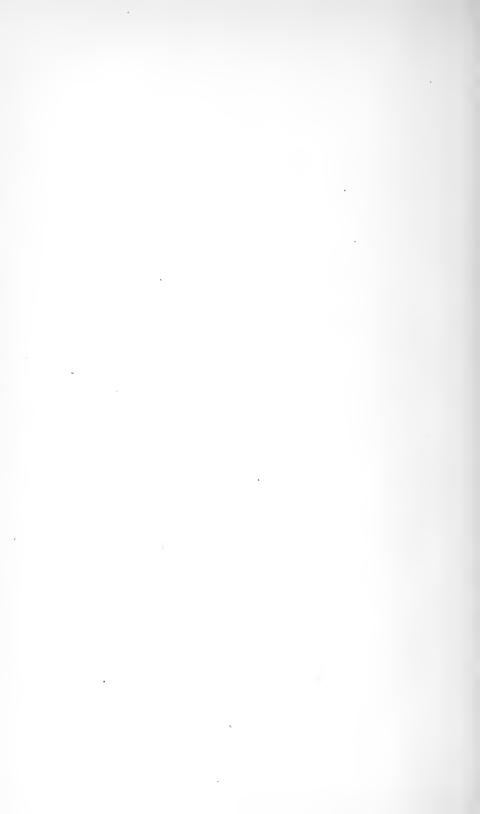
	Industries.	Number of Estab-	Number		Partners	3
	INDUSTRIES.	lishments Considered	Private Firms	Males	Females	Total
1	Agricultural implements,	5	=		-	_
2 3	Arms and ammunition,	10 8	7 3	11	- 1	11 7
4	Artisans' tools,	291	275	1 509	23	512
5	Boxes (paper and wooden),	23	273	30	1	31
6	Burial cases, caskets, coffins, etc.,	1 1	i	2	1 1	2
7	Buttons and dress trimmings,	4	2	26	_	6
8	Carpetings,	5	ī	ĭ	_	ĭ
9	Carriages and wagons	19	15	31	_	31
10	Chemical preparations (compounded).	2 2 47	2	2	1	3
11	Clocks and watches,	2	_	-		_
12	Clothing,	47	40	2 112		112
13	Cooking, lighting, and heating apparatus,	2	-	_	- 1	_
14	Cordage and twine,	12	3	3 13	- 1	13
15	Cottou goods,	136	36	4 62	8	70
16	Cotton, woollen, and other textiles,	2	1	3	-	3
17	Dyestuffs,	1	1	1	-	1
18	Emery and sand paper and cloth, etc.,	2	1	2	-	$\frac{-}{2}$
19 20	Fertilizers,	3	2	2	-	2
21	Food preparations,	74	63	117	_	117
22	Furniture,	47	41	5 87		87
23	Glass,	5	1	2		2
24	Hose: rubber, linen, etc.,	ĭ			_	_
25	Hosiery and knit goods,	11	5	11	-	11
26	Leather,	96	91	6 174	-	174
27	Linen,	3	1	5	- 1	5
28	Liquors: malt, distilled, and fermented, .	23	21	3 37	1	38
29	Lumber,	1	1	2	-	2
30	Machines and machinery,	84	37	76	5	81
31	Metals and metallic goods,	122	73	138	2 3	141
32	Mixed textiles,	11	6	9		9
33	Musical instruments and materials,.	23	12	18	1	19
34	Oils and illuminating fluids,	1 68	1	2 52	-	2 52
35	Paper and paper goods,	16	23 4	7		7
36 37	Print works, dye works, and hleacheries, Railroad construction and equipment,	10	1	i		í
38	Rubber and elastic goods,	20	9	17		17
39	Shipbuilding,	6	4	4	_	4
40	Silk and silk goods,	7	1	2	_	$\overline{2}$
41	Stone,	19	13	30	_	30
42	Straw and palm leaf goods,	16	15	35	1	36
43	Tallow, candles, soap, and grease,	13	11	22	-	22
44	Whips, lashes, and stocks,	1	_	_	-	-
45	Wooden goods,	17	13	19	1	20
46	Woollen goods,	86	59	7 96	-	96
47	Worsted goods,	16	8	16	_	16
48	ALL INDUSTRIES,	1,364	924	8 1,772	5 26	1,798

- ¹ Includes 10 special partners.
- 3 Includes 3 special partners.
- 5 Includes 2 special partners.
- 7 Includes 2 estates.
- ² Includes 1 special partner.
- 4 Includes 1 special partner and 2 estates.
- 6 Includes 5 special partners.
- 8 Includes 26 special partners and 4 estates

1889.

[There are duplications in the columns devoted to "Stockholders." These duplications are indicated by an asterisk(*). They are caused by the fact that the same body of stockholders is sometimes connected with two or more establishments, which establishments are not in the same industry. The plan adopted has been to credit the whole body of stockholders to each industry, but to count them once only in making up the total for "All Industries."]

Number		STOCK	HOLDERS		Aggregates: Partners	
Corporations	Males	Females	Banks, Trustees, etc.	Total	and Stockholders	
5 3 5 16 3 5 16 3 5 16 3 5 16 3 5 16 3 5 16 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	56 30 218 211 41 - 8 401 82 - 83 207 92 238 8,687 *189 - 14 157 246 47 16 *331 *35 13 29 - 657 873 31 115 - 574 *521 - 429 35 142 129	15 2 153 50 15 - 308 51 - 18 113 9 86 5,673 *140 - 7 15 92 7 15 92 7 251 418 10 38 - 251 418 10 38 *426 - 275 8 8 39 4	7 7 42 8 2 2 156 5 5 13 8 15 1,843 *107 3 1 1 *148 *55 5 5 5 5 102 40	78 39 413 264 58 - 8 865 138 - 106 333 104 339 16,203 *436 - 10 - 24 172 338 54 20 *705 116 1,331 - 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,010 1,01	78 50 420 776 89 2 14 866 169 3 106 445 104 352 16,273 *499 1 10 2 26 289 425 56 20 *716 290 *716 290 11,472 1,091 1,472 1,472	1 22 3 3 4 4 5 5 6 7 8 8 9 9 100 111 122 13 14 15 16 17 17 18 19 20 21 22 23 25 26 20 31 32 33 34 41 35 6 37 38 36 40 41 42
1 2 1 4 27 8	7 9 60 *513 123	1 1 1 *293 35	1 143 6	8 10 62 *949 164	30 10 82 *1,045 180	43 44 45 46 47
440	14,950	8,594	2,705	26,249	28,047	48



GENERAL STATISTICS OF MANUFACTURES: BY INDUSTRIES. 1888, 1889.

	1ndustries.	Number of Estab- lishments Considered	Amount of Capital Invested	Value of Stock Used
1 2 3	Agricultural implements,	5 10 8	\$1,389,546 4,404,749 1,574,014	\$456,700 273,69 264,76
4 5 6 7	Boots and shoes, Boxes (paper and wooden), Burial cases, caskets, coffins, etc., Buttons and dress trimmings,	291 23 1 4	19,922,965 868,999 100,000 248,856	33,661,31 899,90 13,00 183,68
8 9 0 1 2 3 4 5 6	Carpetings, Carriages and wagons, Chemical preparations (compounded), Clocks and watches, Clothing, Cooking, lighting, and heating apparatus, Cordage and twine, Cotton goods, Cotton, woollen, and other textiles,	5 19 2 2 47 2 12 136 2	$\begin{array}{c} 6,370,460 \\ 1,750,728 \\ 56,000 \\ 715,014 \\ 6,820,227 \\ 152,135 \\ 4,755,793 \\ 103,154,838 \\ 3,389,623 \end{array}$	3,159,77 860,18 38,50 112,31 8,789,93 48,50 5,091,13 38,576,51 1,718,47
.7	Dyestuffs,	1	150,000	60,00
8	Emery and sand paper and cloth, etc.,	2	106,921	69,36
9 0 1 2	Fertilizers, Flax, hemp, and jute goods, Food preparations, Fnrniture,	1 3 74 47	55,000 470,000 7,314,591 4,550,463	45,00 1,039,61 29,469,43 1,632,43
3	Glass,	5	386,162	106,60
4 5	Hose: rubber, linen, etc.,	1 11	500,000 2,950,798	100,00 $1,475,24$
6 7 8 9	Leather, Linen, Liquors: malt, distilled, and fermented, Lumber,	96 3 23 1	7,451,528 1,638,455 4,835,308 35,530	9,138,85 780,85 1,785,05 10,00
0 1 2 3	Machines and machinery, Metals and metallic goods, Mixed textiles, Musical instruments and materials,	84 122 11 23	17,874,449 17,969,546 1,709,240 4,165,932	4,741,78 9,041,84 1,287,48 1,040,23
4	Oils and illuminating fluids,	1	175,000	233,66
5 6	Paper and paper goods,	68 16	16,316,204 9,912,395	8,413,15 9,411,96
7 8	Railroad construction and equipment, Rubber and elastic goods,	1 20	40,000 11,136,953	92,45 $7,599,88$
9 0 1 2	Shipbuilding,	6 7 19 16	622,891 2,314,103 1,378,404 1,312,454	325,00 2,571,80 339,58 1,501,89
3	Tallow, candles, soap, and grease,	13	1,177,190	1,198,40
4 5 6 7	Whips, lashes, and stocks, Wooden goods, Woollen goods, Worsted goods,	1 17 86 16	181,368 1,087,761 24,848,267 4,827,893	34,74 546,13 13,279,27 4,230,40
8	All Industries,	1,364	\$303,168,753	\$205,750,54

Value of	Persons Ex	IPLOYED DURIN	G THE YEAR	Total	Average	
Goods Made	Average Number	Smallest Number	Greatest Number	Wages Paid During the Year	Yearly Earnings	
\$1,276,435 1,829,268 1,241,443	636 1,813 693	556 1,603 646	1,989 741	\$340,945 1,091,121 412,131	\$536.08 601.83 594.71	
57,755,697 1,812,478 100,000 368,957	28,793 1,187 75 271	21,349 973 50 139	34,929 1,380 84 410	14,479,276 480,212 20,000 79,509	502.87 404.56 266.67 293.39	
5,869,546 1,863,402 88,722 457,666 16,500,887 280,000 6,833,105 81,238,283 3,258,241	3,952 1,039 25 328 5,331 194 2,410 64,263 2,201	3,627 743 12 317 3,962 177 1,577 59,801 2,095	4,143 1,203 28 337 6,434 211 2,755 66,629 2,307	1,356,649 666,340 13,159 225,343 2,331,241 114,721 811,092 20,829,680 803,409	348.28 641.33 526.36 687.02 474.82 591.35 336.55 324.13 365.02	1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1
127,000	28	28	30	24,420	872.14	1
171,720	51	43	56	26,167	513.08	1
69,000 1,434,539 40,288,239 5,349,015	12 850 3,935 3,055	5 822 2,897 2,572	20 892 5,017 3,259	5,000 257,160 1,731,718 1,366,640	416.67 302.54 440.08 447.35	1° 2° 2° 2° 2° 2° 2° 2° 2° 2° 2° 2° 2° 2°
462,339	423	130	510	176,293	416.77	2
550,000 3,844,940	130 2,790	105 1,970	200 3,923	61,713 887,922	474.72 318.25	2
14,845,650 1,299,951 5,076,966 23,500	4,604 951 652 22	3,629 870 568 16	5,286 1,020 748 28	2,464,855 287,474 455,868 11,000	535.37 302.29 699.18 500.00	20 20 20 20 20 20 20 20 20 20 20 20 20 2
16,139,370 22,528,617 2,183,956 4,140,925	10,403 12,763 1,022 2,204	9,218 11,152 914 2,009	11,531 14,080 1,138 2,397	5,638,687 6,198,941 366,379 1,473,839	542.03 485.70 358.49 669.32	20 20 20
263,760	34	25	43	20,400	600.00	3.
18,214,325 14,423,860	6,886 4,263	6,474 3,224	7,224 4,728	2,802,389 1,628,192	$\frac{406.97}{381.94}$	3
156,745 15,175,629	41 5,832	13 5,246	$^{46}_{6,482}$	16,938 2,619,015	$\frac{413.12}{449.08}$	3,
857,032 4,083,301 1,511,447 3,301,094	454 2,337 1,405 2,049	307 2,108 1,034 304	\$45 2,488 1,848 3,364	297,801 743,989 779,222 785,137	655.95 318.35 554.61 383.18	39 40 41 41
2,304,611	441	403	488	199,382	452.11	43
205,310 1,414,992 26,721,808 6,608,195	87 928 13,941 3,110	69 668 12,613 2,547	104 1,140 14,668 3,433	42,465 440,157 5,016,460 1,107,899	488.10 474.31 395.84 356.24	1:
\$394,042,966	198,914	169,610	221,307	\$82,188,350	\$413.19	4

	Industries.	Number of Estab- lishments Considered	Amount of Capital Invested	Value of Stock Used
1 2 3	Agricultural implements,	5 10 8	\$1,478,457 4,378,173 1,570,229	\$566,654 406,976 350,227
4 5 6 7	Boots and shoes,	291 23 1 4	19,718,474 921,300 62,539 257,852	36,180,864 959,153 42,798 151,792
8 9 10 11 12 13 14 15 16	Carpetings, Carriages and wagons, Chemical preparations (compounded), Clocks and watches, Clothing, Cooking, lighting, and heating apparatus, Cordage and twine, Cotton goods, Cotton, woollen, and other textiles,	5 19 2 2 47 2 12 136	6,961,595 1,681,387 50,000 764,526 6,928,375 303,000 4,971,339 99,835,838 3,378,315	$\begin{array}{c} 4,036,614\\ 746,140\\ 50,465\\ 139,352\\ 8,793,010\\ 85,120\\ 6,488,221\\ 48,702,524\\ 1,737,889 \end{array}$
17	Dyestuffs,	1	150,000	64,500
18	Emery and sand paper and cloth, etc.,	2	155,670	111,601
$19 \\ 20 \\ 21 \\ 22$	Fertilizers, Flax, bemp, and jute goods, Food preparations, Furniture,	1 3 74 47	50,000 565,000 8,406,771 3,849,837	38,000 985,921 28,231,399 2,656,282
23	Glass,	5	401,745	141,151
$\frac{24}{25}$	Hose: rubber, linen, etc.,	1 11	500,000 3,018,339	300,000 1,679,565
26 27 28 29	Leather,	96 3 23 1	6,707,767 1,475,911 4,673,754 35,000	9,780,043 789,817 1,904,934 8,300
30 31 32 33	Machines and machinery, Metals and metallic goods, Mixed textiles, Musical instruments and materials,	84 122 11 23	17,527,967 18,427,331 1,716,184 4,091,311	6,915,248 10,838,793 1,363,852 1,684,111
34	Oils and illuminating fluids,	1	175,000	228,000
$\frac{35}{36}$	Paper and paper goods,	68 16	16,810,259 10,729,250	11,473,910 10,717,046
37 38	Railroad construction and equipment, Rubber and elastic goods,	1 20	40,000 9,739,403	117,011 9,469,014
39 40 41 42	Shipbuilding,	6 7 19 16	684,000 2,323,666 1,428,422 1,300,508	467,845 2,714,586 345,841 1,513,005
43	Tallow, candles, soap, and grease,	13	1,147,781	1,719,291
44 45 46 47	Whips, lashes, and stocks,	1 17 86 16	168,637 1,129,270 23,134,159 4,980,822	42,496 650,384 16,796,912 5,077,349
48	ALL INDUSTRIES,	1,364	\$298,805,163	\$238,264,006

	Average	Total	THE YEAR	PLOYED DURING	Persons Em	Value of
	Yearly Earnings	Wages Paid During the Year	Greatest Number	Smallest Number	Average Number	Goods Made
1 2 3	\$502.31 607.36 606.28	\$331,024 1,600,926 449,253	687 1,790 792	623 1,524 677	659 1,648 741	\$1,305,138 1,835,261 1,270,329
5 6 7	510.41 415.26 513.00 332.22	14,972,926 498,316 14,364 62,789	$\begin{array}{c} 33,942 \\ 1,325 \\ 30 \\ 245 \end{array}$	24,082 1,074 26 132	29,335 1,200 28 189	59,878,717 1,842,223 76,566 277,811
8 9 10 11 12 13 14 15 16	362.41 572.54 525.47 744.74 421.38 527.49 334.23 329.33 390.37	1,486,620 599,190 7,882 218,188 2,310,001 104,970 890,056 21,586,277 779,185	4,325 1,179 23 330 6,643 206 3,327 68,086 2,142	3,478 884 11 115 4,067 187 1,860 61,596 1,872	4,102 1,046 15 293 5,482 199 2,663 65,546 1,996	6,42S,516 1,640,269 75,491 490,956 15,62S,004 260,850 8,606,092 84,579,763 2,970,890
17	490.24	14,217	30	28	29	135,000
18	477.57	27,699	76	50	58	180,901
19 20 21 22	553.33 314.09 454.85 463.54	3,320 288,023 1,765,268 1,230,699	20 1,052 4,631 2,949	757 3,169 2,236	6 917 3,881 2,655	60,000 1,393,477 37,712,271 5,275,561
23	432.09	205,675	564	348	476	516,219
24 25	443.62 314.50	64,769 783,722	180 2,899	110 1,757	146 2,333	458,000 2,880,462
26 27 28 29	519.82 305.44 731.51 454.55	2,379,715 274,590 468,897 5,000	5,356 958 719 16	3,609 858 587 5	4,578 899 641 11	14,114,660 1,191,446 5,027,454 14,730
30 31 32 33	561.27 501.61 382.11 690.68	6,207,613 6,507,947 366,447 1,563,700	12,198 14,421 1,052 2,481	9,849 11,396 870 2,088	11,060 12,974 959 2,264	18,041,643 24,817,604 2,956,641 4,500,733
34	571.43	20,000	44	23	35	256,000
35 36	$\frac{498.07}{464.56}$	2,836,076 1,718,869	7,387 4,640	6,487 3,653	6,950 3,700	19,127,017 14,836,476
37 38	475.16 414.10	21,382 2,576,144	53 6,843	38 5,087	$^{45}_{6,221}$	166,356 14,649,870
39 40 41 42	$\begin{array}{c} 621.58 \\ 332.99 \\ 598.51 \\ 394.75 \end{array}$	261,687 756,886 734,967 727,138	582 2,371 1,480 3,128	319 2,156 920 422	421 2,273 1,228 1,842	911,500 4,536,297 1,483,989 2,894,900
43	443.48	211,982	536	428	478	2,520,188
44 45 46 47	558.41 481.59 364.34 361.99	36,855 434,391 5,144,114 1,222,078	68 1,014 15,013 3,616	63 782 12,751 3,102	66 902 14,119 3,376	195,766 1,362,982 27,238,302 6,989,697
48	\$419.17	\$84,121,837	221,449	176,097	200,685	\$403,696,958

GENERAL STATISTICS OF MANUFACTURES: BY INDUSTRIES — Continued.

COMPARISON. CAPITAL INVESTED - 1888, 1889.

Agricultural implements, defered sidered sider						
Sidered 1885 1889 1898	Industries.	Estab- lishments			Decrease (-),	Percent- ages
Artisan's tools,			1888	1889	in 1889	
Boxes (paper and wooden)	Arms and ammunition,	10	4,404,749	4,378,173	26,576	$^{+6.40}_{-0.60}_{-0.24}$
Carriages and wagons,	Boxes (paper and wooden), Burial cases, caskets, coffins, etc.,	23 1	868,999 100,000	921,300 62,539	+52,301 -37,461	$ \begin{array}{r} -1.03 \\ +6.02 \\ -37.46 \\ +3.61 \end{array} $
Double	Carriages and wagons,					$^{+9.28}_{-3.96}$
paratus	pounded),	2	715,014	764,526	$-6,000 \\ +49,512 \\ +108,148$	-10.71 $+6.92$ $+1.59$
Emeryandsandpaperand cloth, etc., 2 106,921 155,670 +48,749 +45.59 Fertilizers,	paratus,	12 136	4,755,793 103,154,838	4,971,339 99,835,838	-3,319,000	+99.17 $+4.53$ -3.22 -0.33
Fertilizers,	Dyestuffs,	1	150,000	150,000	-	-
Flax, hemp, and jute goods, 3	Emery and sand paper and cloth, etc.,	2	106,921	155,670	+48,749	+45.59
Hose : rubber, linen, etc.,	Flax, hemp, and jute goods, Food preparations,	3 74	470,000 7,314,591	565,000 8,406,771	+95,000 +1,092,180	$-9.09 \\ +20.21 \\ +14.93 \\ -15.40$
Hosiery and knit goods,	Glass,	5	386,162	401,745	+15,583	+4.04
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					+67,541	$+2.29^{-}$
Lumber, 1 35,530 35,000 -530 -1.49 Machines and machinery . 84 17,874,449 17,527,967 -346,482 -1.94 Metals and metallic goods . 122 17,969,546 18,427,331 +457,785 +2.35 Mixed textiles . . 11 1,709,240 1,716,184 +6,944 +0.11 Musical instruments and materials 23 4,165,932 4,091,311 -74,621 -1.79 Oils and illuminating fluids 1 175,000 175,000 - - Paper and paper goods . 68 16,316,204 16,810,259 +494,055 +3.03 Paper and paper goods 16 9,912,395 10,729,250 +816,855 +8.24 Railroad construction and equipment . . 1 40,000 40,000 -1,397,550 -12.55 Shipbuilding . . 6 622,891 684,000 +61,109 +9.81	Linen,	3	1,638,455	1,475,911	162,544	-9.98 -9.92
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						-3.34 -1.49
Paper and paper goods	Metals and metallic goods, Mixed textiles,	122 11	17,969,546 1,709,240	18,427,331 1,716,184	+457,785 +6,944	-1.94 + 2.55 + 0.41 - 1.79
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Oils and illuminating fluids,	1	175,000	175,000	-	-
Railroad construction and equipment,	Print works, dye works, and				' '	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	bleacheries,	16	9,912,395	10,729,250	+816,855	+8.24
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ment,				-1,397,550	_12.55
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Silk and silk goods,	7 19	2,314,103 1,378,404	2,323,666 1,428,422	+9,563 +50,018	$^{+0.41}_{+3.63}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Tallow, candles, soap, and grease,	13	1,177,190	1,147,781	-29,409	-2.50
ALL INDUSTRIES, 1,364 \$303,168,753 \$298,805,163 -\$4,363,5901.44	Wooden goods,	17 86	1,087,761 24,848,267	1,129,270 23,134,159	+41,509 $-1,714,108$	+3.82 -6.90
	ALL INDUSTRIES,	1,364	\$303,168,753	\$298,805,163	-\$4,363,590	-1.44

GENERAL STATISTICS OF MANUFACTURES: BY INDUSTRIES — Concluded.

COMPARISON. WAGES PAID - 1888, 1889.

Industries.	Number of Estab- lishments Con-	TOTAL W	AGES PAID	Increase (+), or Decrease (-),	Percent-	
	sidered	1888	1889	in 1889		
Agricultural implements, Arms and ammunition, Artisans' tools,	5 10 8	\$340,945 1,091,121 412,131	\$331,024 1,000,926 449,253	-\$9,921 -90,195 +37,122	-2.91 -8.26 $+9.01$	
Boots and shoes, Boxes (paper and wooden), Burial cases, caskets, coffins, etc., Buttons and dress trimmings,	291 23 1 4	14,479,276 480,212 20,000 79,509	14,972,926 498,316 14,364 62,789	+493,650 +18,104 -5,636 -16,720	$\begin{array}{r} +3.41 \\ +3.77 \\ -28.18 \\ -21.03 \end{array}$	
Carpetings,	5 1 9	1, 356,649 666,340	1,486,620 599,190	+129,971 -67,150	$^{+9.58}_{-10.08}$	
pounded),	2 2 47	13,159 225,343 2,531,241	7,882 218,188 2,310,001	-5,277 -7,155 -221,241	-40.10 -3.17 -8.74	
apparatus,	12 136 2	$\begin{array}{c} 114,721 \\ 811,092 \\ 20,829,680 \\ 803,409 \end{array}$	21,586,277	-9,751 +78,964 +756,597 -24,224	-8.50 $+9.74$ $+3.63$ -3.02	
Dyestuffs,	1	24,420	14,217	-10,203	-41.78	
Emery and sand paper and cloth, etc.,	2	26,107	27,699	+1,532	+5.85	
Fertilizers, Flax, hemp, and jute goods, Food preparations, Furniture,	1 3 74 47	5,000 257,160 1,731,718 1,366,640	3,320 288,023 1,765,268 1,230,699	-1,680 +30,863 +33,550 -135,941	$-33.60 \\ +12.00 \\ +1.94 \\ -9.95$	
Glass,	5	176,293	205,675	+29,382	+16.67	
Hose: rubber, linen, etc., Hosiery and kuit goods,	1 11	61,713 887,922	64,769 733,722	+3,056 -154,200	+4.95 -17.37	
Leather,	96 3 23	2,464,855 287,474 455,868	2,379,715 274,590 468,897	-85,140 -12,884 +13,029	-3.45 -4.48 $+2.86$	
Lumber,	1	11,000	5,000	-6,000	-54.55	
Machines and machinery, Metals and metallic goods, Mixed textiles, Musical instruments and materials,	84 122 11 23	5,638,687 6,198,941 366,379 1,473,839	6,207,613 6,507,947 366,447 1,563,700	+568,926 +309,006 +68 +89,861	+10.09 $+4.98$ $+0.02$ $+6.10$	
Oils and illuminating fluids,	1	20,400	20,000	-400	-1.96	
Paper and paper goods,	68	2,802,389	2,836,076	+33,687	+1.20	
Print works, dye works, and bleacheries,	16	1,628,192	1,718,869	+90,677	+5.57	
Railroad construction and equipment,	1 20	16,938 2,619,015	21,382 2,576,144	+4,444 -42,871	+26.24 -1.64	
Shipbuilding,	6 7 19 16	297,801 743,989 779,222 785,137	261,687 756,886 734,967 727,138	$\begin{array}{r} -36,114 \\ +12,897 \\ -44,255 \\ -57,999 \end{array}$	-12.13 $+1.73$ -5.68 -7.39	
Tallow, candles, soap, and grease,	13	199,382	211,982	+12,690	+6.32	
Whips, lashes, and stocks, Wooden goods, Worsted goods,	1 17 86 16	42,465 440,157 5,016,460 1,107,899	36,855 434,391 5,144,114 1,222,078	$\begin{array}{r} -5,610 \\ -5,766 \\ +127,654 \\ +114,179 \end{array}$	$\begin{array}{r} -13.21 \\ -1.31 \\ +2.54 \\ +10.31 \end{array}$	
All Industries,	1,364	\$\$2,188,350	\$84,121,837	+\$1,933,487	+2.35	



SMALLEST AND GREATEST NUMBER OF PERSONS EMPLOYED:

BY INDUSTRIES.

1888, 1889.

[In this table, by the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, as regards aggregate number of persons employed, when the smallest or greatest number, respectively, were employed.]

AGGREGATES - 1888.

Industries.	Number of Estab- lishments Con- sidered	Aggregates of Persons Employed at Periods of Em- ployment of Smallest Number	Aggregates of Persons Employed at Periods of Em- ployment of <i>Greatest</i> Number	Excess of Greatest over Smallest Number
Agricultural implements,	5	556	691	135
Arms and ammunition,	10	1,603	1,989	386
Artlsans' tools,	1 8	646	741	95
Boots and shoes,	291	21,349	34,929	13,580
Boxes (paper and wooden),	23	973	1,380	407
Burial cases, caskets, coffins, etc.,	1	50	84	34
Buttons and dress trimmings,	4	139	410	271
Carpetings,	5	3,627	4.143	516
Carriages and wagons,	19	743	1,203	460
Chemical preparations (compounded), .	2	12	28	16
Clocks and watches,	2	317	337	20
Clothing,	47	3,962	6,434	2,472
Cooking, lighting, and heating apparatus,	2	177	211	34
Cordage and twine,	12	1,577	2,755	1,178
Cotton goods,	136	59,801	66,629	6,828
Cotton, woollen, and other textiles,	2	2,095	2,307	212
Dyestuffs,	1	28	30	2
Emery and sand paper and cloth, etc., .	2	43	56	13
Fertilizers,	1	5	20	15
Flax, hemp, and jute goods,	3	822	892	70
Food preparations,	74	2,897	5,017	2,120
Furniture,	47	2,572	3,259	687
Glass,	5	130	510	380
Hose: rubber, linen, etc.,	1 1	105	200	95
Hosiery and knit goods,	11	1,970	3,923	1,953
Hosery and knit goods, Leather,	96	3,629	5,286	1,657
Linen,	3	870	1,020	150
Liquors: malt, distilled, and fermented,.	23	568 16	748 28	180 12
Lumber,	84	9,218	11,531	2,313
Machines and machinery,	122	11,152	14,080	2,928
Metals and metallic goods,	111	914	1,138	224
Mixed textiles,	23	2.009	2,397	388
Oils and illuminating fluids,	1	25	43	18
Paper and paper goods,	68	6,474	7,224	750
Print works, dye works, and bleacheries,	16	3,224	4,728	1,504
Railroad construction and equipment, .	1	13	46	33
Rubber and elastic goods,	20	5,246	6,482	1,236
Shipbuilding,	6	307	845	538
Silk and silk goods,	7	2,108	2,488	380
Stone,	19	1,034	1,848	. 814
Straw and palm leaf goods,	16	304	3,364	3,060
Tallow, candles, soap, and grease,	13	403	488	85
Whips, lashes, and stocks,	1	69	104	35
Wooden goods,	17	668	1,140	472
Woollen goods,	86	12,613	14,668	2,055
Worsted goods,	16	2,547	3,433	886
ALL INDUSTRIES,	1,364	169,610	221,307	51,697

[In this table, by the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, as regards aggregate number of persons employed, when the smallest or greatest number, respectively, were employed.]

AGGREGATES — 1889.

Industries.	Number of Estab- Iishments Con- sidered	Aggregates of Persons Employed at Periods of Em- ployment of Smallest Number	Aggregates of Persons Employed at Periods of Em- ployment of <i>Greatest</i> Number	Excess of <i>Greatest</i> over <i>Smallest</i> Number
Agricultural implements,	5	623	687	64
Arms and amminition,	10	1,524	1,790	266
Artisans' tools	8	677	792	115
Boots and shoes	291	24,082	33,942	9,860
Boots and shoes, Boxes (paper and wooden), Burial cases, caskets, coffins, etc.,	23	1,074	1,325	251
Burial cases, caskets, coffins, etc	1	26	30	4
Buttons and dress trimmings,	1	132	245	113
Carpetings,	5	3,478	4,325	847
Carriages and wagons,	19	884	1,179	295
Chemical preparations (compounded), .	2	11	23	12
Clocks and watches,	2	115	330	215
Clothing,	47	4.067	6,643	2,576
Cooking, lighting, and heating apparatus,	2	187	206	19
Cordage and twine,	12	1,860	3,327	1,467
Cotton goods,	136	61,596	68,086	6,490
Cotton, woollen, and other textiles,	2	1,872	2,142	270
Dyestuffs,	1	28	30	2
Emery and sand paper and cloth, etc., .	2	50	76	26
Fertilizers,	1	1	20	19
Flax, hemp, and jute goods,	3	757	1,052	295
Food preparations,	74	3,109	4,631	1,522
Food preparations,	47	2,236	2,949	713
	5	348	564	216
Hose: rubber, linen, etc.,	1	110	180	70
Hosiery and knit goods,	11	1,757	2,899	1,142
Hose: rubber, linen, etc., Hosiery and knit goods, Leather, Linen,	96	3,609	5,356	1,747
Linen,	3	858 587	958 719	100 132
Liquors: malt, distilled, and fermented, .	23 1	5 5	16	111
Lumber,	84	9,849	12,198	2,349
Machines and machinery, Metals and metallic goods,	122	11,396	14,421	3,025
Mixed textiles,	111	870	1,052	182
Musical instruments and materials, .	23	2,088	2,481	393
Oils and illuminating fluids,	1	23	2,101	21
Paper and paper goods,	68	6,487	7,357	900
Print works, dye works, and bleacheries,		3,653	4,640	987
Railroad construction and equipment	1	38	53	15
Rubber and elastic goods	20	5,087	6,843	1,756
Rubber and elastic goods, Shipbuilding,	6	319	582	263
Silk and silk goods,	7	2,156	2,371	215
Stone,	19	920	1,480	560
Straw and palm leaf goods, Tallow, candles, soap, and grease,	16	422	3,128	2,706
Tallow, candles, soap, and grease,	13	428	536	108
Whips, lashes, and stocks,	1	63	68	5
Wooden goods,	17	782	1,014	232
Woollen goods,	86	12,751	15,013	2,262
Worsted goods,	16	3,102	3,616	514
ALL INDUSTRIES,	1,364	176,097	221,449	45,352

[In this table, averages for each establishment are given. These have been arrived at by dividing the aggregates given in the preceding table by the number of establishments.]

AVERAGES - 1888.

				AVERAGE	S
	Number of Estab-	Average Number of Persons		F PERSONS H ESTABLI	
Industries.	lishments Con- sidered	Employed in each Establish- ment	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number
Agricultural implements,	5 10	127 181	111 160	138 199	27 39
Artisans' tools,	8	87	81	93	12
Boots and shoes,	291	99	73	120	47
Boxes (paper and wooden),	23	52	42	60	18
Burial cases, caskets, coffins, etc.,	1	75	50	84	84
Buttons and dress trimmings,	4	68	35	103	68
Carpetings,	5	790	725	829	104
Carriages and wagons,	19	55	39	63	24
Chemical preparations (compounded), .	2	13	6	14	8
Clocks and watches,	2	164	159	169	10
Clothing,	47	113	84	137	53
Cooking, lighting, and heating apparatus,	12 12	97 201	89 131	106 230	17 99
Cordage and twine,	136	473	440	490	50
Cotton, woollen, and other textiles,	130	1,101	1,048	1,154	106
Dyestuffs,	ĩ	28	28	30	2
Emery and sand paper and cloth, etc., .	2	26	22	28	6
Fertilizers,	1	12	5	20	15
Flax, hemp, and jute goods,	3	283	274	297	23
Food preparations,	74	53	39	68	29
Furniture,	47	65	55	69	14
Glass,	5	85	26 105	102 200	76 95
Hose: rubber, linen, etc.,	11	130 254	179	357	178
Leather,	96	. 48	38	55	17
Linen,	3	317	290	340	50
Liquors: malt, distilled, and fermented, .	23	28	25	33	8
Lumber,	1	22	16	28	12
Machines and machinery,	84	124	110	137	27
Metals and metallic goods,	122	105	91	115	24
Mixed textiles,	11	93 96	83	103 104	20 17
Musical instruments and materials, Oils and illuminating fluids	23 1	34	87 25	43	18
Oils and illuminating fluids, Paper and paper goods,	68	101	95	106	11
Print works, dye works, and bleacheries,	16	266	202	296	94
Railroad construction and equipment, .	i	41	13	46	33
Rubber and elastic goods,	20	292	262	324	62
Shipbuilding,	6	76	51	141	90
Silk and silk goods,	7	334	301	355	54
Stone,	19	74	54	97	43
Straw and palm leaf goods,	16	128	19	210	191
Tallow, candles, soap, and grease,	13	34	31	38	7 35
Whips, lashes, and stocks,	1 1	87	69	104	28
Wooden goods,	17 86	$\frac{55}{162}$	39 147	67 171	28 24
Worsted goods,	16	194	159	215	56
ALL INDUSTRIES	1,364	146	124	162	38
ALL INDUSTRIES,	1,504	140	124	102	90

[In this table, averages for each establishment are given. These have been arrived at by dividing the aggregates given in the preceding table by the number of establishments.]

AVERAGES - 1889.

				AVERAGE	s	
	Number of Estab-	Average Number of Persons	NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT			
Industries.	lishments Con- sidered	Employed in each Establish- ment	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number	
Agricultural implements,	5	132	125	137	12	
Arms and ammunition	10	165	152	179	27	
Artisans' tools,	8	93	85	99	14	
Boots and shoes,	291	101	83	117	34	
Boxes (paper and wooden),	23	52	47	58	11	
Burial cases, caskets, coffins, etc.,	1	28	26	30	4	
Buttons and dress trimmings,	. 4	47	33	61	28	
Carpetings,	5	820	696	865	169	
Carriages and wagons,	19	55	47	62	15	
Chemical preparations (compounded), .	2	8	6	12	6	
Clocks and watches,	1 2 1	147	58	165	107	
Clothing,	47	117	87	141'	54	
Cooking, lighting, and heating apparatus,	2	100	94	103	9	
Cordage and twine,	12	222	155	277	122	
Cotton goods,	136	482	453	501	48	
Cotton, woollen, and other textiles,	2	998	936	1,071	135	
Dyestuffs,	1	29	28	30	2	
Emery and sand paper and cloth, etc., .	2	29	25	38	13	
Fertilizers,	1	6	1	20	19	
Flax, hemp, and jute goods,	3	306	252	351	99	
Food preparations,	74	52	42	63	21	
Furniture,	47	56	48	63	15	
Glass,	5	95	70	113	43	
Hose: rubber, linen, etc.,	1	146	110	180	70	
Hosiery and knit goods,	11	212	160	264	104	
Leather,	96	48	38	56	18	
Linen,	3	300	286	319	33	
Liquors: malt, distilled, and fermented, .	23	28	26	31	5	
Lumber,	1	11	5	16	11	
Machines and machinery,	84	132	117	145	28	
fetals and metallic goods,	122	106	93	118	25	
Mixed textiles,	11	87	79	96	17	
fusical instruments and materials,	23	98	91	108	17	
Dils and illuminating fluids,	1	35	23	44	21	
Paper and paper goods,	68	102	95 228	109	14	
Print works, dye works, and bleacheries,	16	231		290	62 15	
Railroad construction and equipment, .	$\frac{1}{20}$	45 311	38 254	53 342	88	
Rubber and elastic goods,					44	
Shipbuilding,	6 7	$\frac{70}{325}$	53 308	97 339	31	
Silk and silk goods,	19	65	48	78	30	
Stone,	16	115	26	196	170	
Straw and palm leaf goods,	13	37	33	41	8	
Fallow, candles, soap, and grease,	1 1 1	66	63	68	5	
Whips, lashes, and stocks,	17	53	46	60	14	
Wooden goods,	86	164	148	175	27	
Woollen goods,	16	211	194	226	32	
Worsted goods,						
ALL INDUSTRIES,	1,364	147	129	162	33	

[This presentation shows, for the periods of employment of smallest number and the periods of employment of greatest number, by months and for the years mentioned, the number of establishments considered and the number of persons employed, respectively. "During the year" means that certain establishments employed the same number of persons throughout the year; consequently, the number of establishments and the number of persons employed are given in both columns.]

MONTHS - 1888, 1889.

Industries, Years, and Months.						MENT OF	OF EMPLOY- SMALLEST UMBER	MENT OF	OF EMPLOY- GREATEST MBER			
					Estab- lishments	Persons Employed	Estab- lishments	Persons Employed				
A	RICUI	TU	RAL]	Гмрі	EME	NTS.						
			1888	3.					5	556	5	691
January, .									1	152	1	35
June, .	•	•	•	٠	•	•	•	•	1	313	1	91
July, . August, .		•	•	•	•	•	•	•	$\frac{1}{2}$	5 86		-
October.	•	•	•	•	•	•	•	•		- 00	ī	182
December,	•	•	•	•	•	•	•	:			2	383
Document,	۰	•	•	•	•	•	•	•			-	o o o
			1889	٠.					5	623	5	687
January, .									1	183	1	30
February,									-	-	1	81
May,											2	381
June,	•		•		•		•	•	1	10	-	705
July, .	•	•	•	•	•	•	•	•	$\frac{1}{2}$	47 383	1	195
December,	•	•	•	•	•	•	•	•	2	383		_
	ARMS	ANI	о Ам	MUN	ITIO	N.						
			1888						10	1,603	10	1,989
January, .									-		1	28
March, .	•			•	•		•	•	1	462	1 1	21
April, .	•	•	•	•	•	•		٠	$\frac{1}{2}$	-	1	55
May, . June, .	•	•	•	•	•	•	•	•		298	2	725
July, .	•	•	•		•	•	•	•	-3	200	ī	333
September,	•	•	•	•	•	•	•		ı	40		000
October, .	•	•	•	•	•	•	•	•		-	2	585
November.	·	:	•	Ċ		•			1	3	ī	144
December,									2	600	1	98
			1889						10	1,524	10	1,790
January, .			1999	•					1	60	_	-
March, .	•	•	•	•	•	•	•	•	1 -	- 00	2	260
April,	•	•	•	•	•	•	•	:	1	12	ĩ	146
May,	:	:	:	:	:	:	:		î	180	-	-
June,		:	:	:					2	118	1	479
July,									1	101	- i	-
August, .									1	3	-	-
September,								.	2	600	-	
October, .									-	-	1 1	75
November,	•	•					•		-	-	1	210
December,		•	•	•		•	•		7	450	3	170
During the y	ear,	•	٠	•	•	•	•	٠	1	450	1	450

Indu	STRIE	s. V	EARS	, ANI	Mo	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	OF EMPLOY- GREATEST MBER
		., .	2	,	2,20				Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
	AF	TIS	ANS'	Too	LS.							
			1888	9.					8	646	8	741
January, .									-	_	2	338
March, . July, .	٠	٠	٠		٠			:	$\frac{1}{2}$	24 89	1 1	142 35
August, .	:		·	:	:		:	:	2	187	- 1	~
October, .									=	-	1	35
November, December,	•	•		•	:		:	:	1	225 33	2	103
During the ye	ear,	÷	:						Ī	88	ī	88
			1889).					8	677	8	792
January, .									1	77	1	110
February,						•		•	1	32	-	-
March, . May, .	:	:	:	:	:	:		:	3 -	225	2	6S
June, .		:		·		:	÷	:	-	-	2	232
July,	•			٠	٠	•	•		$\frac{1}{2}$	75 268	-	_
August, . October, .	:	:	:	:	:	:	:	:		205	ī	85
December,							·		-	-	2	297
	Во	ors	AND	Sно	ES.							
			1888	3.					291	21,349	291	34,929
January, .									17	1,198	22 7	3,286
February, March,	•	•	•			•	•	:	12 11	1,065 530	26	695 2,793
April, .	:	:		:	:	Ċ	:	:	19	1,821	18	1,870
May,									23 21	1,635	11 23	1,193
June, July,	•	•	•	•	•	•	•	:	21 33	1,292 1,819	23	$\frac{2,520}{3,745}$
August, .		÷					·		4	220	31	5,312
September, October,	•	٠		•		•		٠	7 17	540 2,056	30 22	3,697 2,082
November,	:	:	:	:	:	:	:	:	47	4,383	17	2,407
December,									43	2,409	2 1 37	2,948
During the ye	ear,				٠		•	•	37	2,381		2,381
T			1889).					291	24,082	291	33,94 2 4,903
January, . February,	:	:	:	:	:	:	:	:	72 14	6,450 931	37 8	891
March, .									10	651	23	2,817
April, .	٠	•	•			•		•	18 10	2,898 1,117	19 15	1,80 5 1,62 7
May, . June, .		:	:	:	:	:	:	:	9	1,508	13	1,317
July, .									21	1,550	18	2,138
August, . September,		•	•		:	•	•		9 18	508 1,382	33 24	4,903 3,841
October, .	:	:	·	÷	÷	:	:	÷	12	1,014	13	2,464
November,						٠	٠	٠	23 11	1,712 839	7 17	1,115 2,599
December, During the ye	ar,	:	:	:	:	:	:	:	64	3,522	64	3,522
Boxe	s (I	APF	ER AI	VD V	Voor	DEN).						
			1888						23	973	23	1,380
January, .		٠,							5 1	201 26	2	114
February, March,	:	:			:	:	:	:	_	20	3	126
April, .									2	179	3	159
May, .						٠	•	•	1	+	- 2	81
June, . July, .	:	:	:	:	:	:	:	:	1	73	2 1	70
August, .									3	66	2 1	126
September,	•	•			:	:	:	:	1 1	67 45	1 2	80 236
October									5	202	4	278
October, . December, Duriug the ye	:					•			3	110	3	110

lypn	STRIE	s. V	CARS	ANT	Mo:	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	OF EMPLOY GREATEST MBER
11100	011113	٥, 11	321104	ALI					Estab- lishments	Persons Employed	Estab- lishments	Persons Employee
Boxes	(Pap	ER A	ND V	Voc	DEN) — (Con.					
		1	889						23	1,074	23	1,325
January, .									7	393	3	123
February,								•	1	38	1 1	21
farch,			•			•	•	٠	1	93	. 1	160 79
April, . Iay, .			•	•	•	•	•	:	1	74	2	120
une, .	:	:	:	:	i.	:	÷	:		'-	2	143
uly, .									-	-	2	6
Lugust, .								•	3	74	$\frac{2}{2}$	89
eptember,	•		•		•	•	•	•	2	94 46	2	129
October, . November,	•	•	•		•	:	•	:	1 1	5	1	4
December,	:	:	:	:	:	:	:	:	3	130	3	226
During the y	ear,								3	127	3	12'
Burial (CASES	. CA	SKET	rs, (Coff	INS,	ETC.					
			888.			ĺ			1	50	1	8-
uly, .									1 1	50	-	
ctober, .									-	-	1	8-
		78	889.						1	26	1	30
			000.						1 1	26	1 1	
anuary, . Lugust, .	•	•	•		•	•	•	•	1 1	20	1 1	30
_	•	•	•	•	•	•	•	•			_	
Butte	ONS A	ND I	DRES	s T	RIM	HING	s.					
		1	888.						4	139	4	410
farch, .									-	-	1	128
pril, .									-	-	1 1	250
Iay,								•	2	-	1	28
uly, . October, .	•	•		•	•	•	:	:	2	85	1	-
Tovember,	:	:	:	:	:	:	:	:	- 1	20		
December,								٠	1	34	-	-
		18	889.						4	132	4	248
ebruary,		-	333						1	27		
Iarch, .	:	:	:	:		:	:	:	- 1	1	2	207
									1	80		-
								•	1	21		
une, . uly, .					•	•	•	•	1	4	- ī	
une, . uly, . August, .	:	•			•	•	•	•	_	_	1 1	3
une, . uly, . ugust, . Tovember,	:	:	•	•								
une, . uly, . ugust, . Tovember,	:	•	•	•	٠	•	•		_			
une, . uly, . ugust, . Jovember,	:	Cari	PETI	igs.	•	•	•				5	4 1.1
une, uly, ugust, lovember, lecember,	:	Cari	•	igs.	•	•	·		5	3,627	5	
une, uly, august, lovember, december,		Cari	PETI	igs.	•	•			5		1	99-
une, uly, august, lovember, locember, anuary,		Cari	PETI	igs.	•	:		:	5 • - - 1	3,627 - - 849	1	99-
une, uly, voyember, December, anuary, anuary, lay, une,		Cari	PETI	igs.	:	:	:	:	5 - 1 2	3,627 - -	1 1	99- 2,128
une, uly, ulyst, lovember, eccember, anuary, pril, fay, une, uly,		Cari	PETI	igs.	:		:	:	5 - - 1 2	3,627 - 849 710 -	1 1 - 1	99- 2,128
une, uly, uly, lovember, ecember, anuary, pril, lay, une, eptember,		Cari	PETI	igs.			:	:	5 - 1 2	3,627 - - 849	1 1 - 1	99- 2,128 - 61
une, uly, ugust, . Tovember, . Secember, . anuary, . pril, . fay, . une, . uly, . eptember, .		Cari	PETI	igs.	:		:	:	5 - 1 2 - 1	3,627 - 849 710 -	1 1 - 1	99- 2,128 - 69 - 738
une, uly, taugust, tovember, eccember, anuary, tay, uly, eptember,		Cari	SSS.	NGS.			:	:	5 - 1 2 - 1 - 1	3,627 - 849 710 - 1,838 - 230	1 1 - 1 - 1 1	99- 2,123 61 733 230
une, inly, ingust, ing		Cari	PETI	NGS.			:	:	5 1 2 - 1 - 1 5	3,627 - 849 710 - 1,838 - 230 3,478	1 1 - 1 - 1	99- 2,123 61 733 230
une, uly, anuary, farch, anuary, anuary, farch, anuary, anuary, farch, anuary,		Cari	SSS.	NGS.			:	:	5 - - 1 2 - 1 - 1 5 1 1	3,627 	1 1 - 1 - 1 1	99- 2,124 61 733 230 4,324
une, uly, Lugust, Vovember, December, April, Lay, uly, petbern, During the y Pebruary, Larch, Lay,		Cari	SSS.	NGS.				: : : : : : : : : : : : : : : : : : : :	5 1 2 - 1 - 1 5 1 1 1	3,627 - 849 710 - 1,838 - 230 3,478 44 211 1,570	1 1 - 1 1 1 1 5	994 2,123 61 733 230 4,325
une, uly, anuary, . August, . Covember, anuary, . April, . Inay, .		Cari	SSS.	NGS.					5 - - 1 2 - - 1 - 1 5 1 1	3,627 	1 1 - 1 1 1 5	99- 2,122 61 733 230 4,323 2,093
une, 'uly, 'August, 'November, 'December, 'April, 'April, 'August, 'Cebruary, 'Gebruary, 'Gebruary, 'Garch, 'August, 'Au		CARI	SSS.	NGS.					5 1 2 - 1 - 1 5 1 1 1	3,627 - 849 710 - 1,838 - 230 3,478 44 211 1,570	1 1 - 1 1 1 5	994 2,126 61 733 230 4,326 2,093
fanuary, . April, . April, . April, . Aunuary, . April, . Aunuary,		Cari	SSS.	NGS.					5 	3,627 - 849 710 - 1,838 - 230 3,478 44 211 1,570	1 1 - 1 1 1 5	4,148 994 2,128 61 733 230 4,326 2,008

INDI	USTRIE:	s, Yea	RS. AN	ь Мо	NTHS		MENT OF	OF EMPLOY- SMALLEST IMBER	MENT OF	OF EMPLOY GREATEST MBER
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,	2 2 2 2			Estab- lishments	Persons Employed	Estab- lishments	Persons Employee
C	ARRIA	GES A	ND W	AGO	NS.					
		18	88.				19	743	19	1,203
January, .								_	2	280
February,	*				•		-	36	3	123
March, . April, .				•	•	:		19	3	131
May,				÷	÷	÷			2	92
June, .									6	475
July, .					•		$\frac{1}{2}$	20 154	_	_
August, . September,	:	: :	•					60	I I	
October, .							4	211	-	_
lovember,							. 3	76	-	
December,			•		٠			92	1 2	27 75
Ouring the y	ear,		•	•	•	•		75		
		188	39.				19	884	19	1,179
anuary, .					•			353	- 2	0.5
'ebruary, Iarch, .	•				•		2 -	49	1 1	85 40
pril, .	:		:		•	: :			$\frac{1}{2}$	80
lay, .	· ·				i.		1 1	-	2 2 4 1	98
une, .									1 4 1	423
uly, . .ugust, .	•		•	•			1 2	25 71	1 1	175 53
eptember,	:	: :			:	: :	ĩ	168	i	18
etober, .							2	43	-	_
Tovember,								12	1	44
Ouring the y	ear,			٠	•		4	163	4	163
CHEMICAL	PREE	PARATI	ions (Сом	POUN	DED).				
		188	38.				2	12	2	28
farch, .							- 1	6	1	20
	•		•	•			1 1	6	1 [_
ine .			,	:	:	: :		_	1	8
une, .	:									
une, .	:							,,		99
une, . December,	:	188	§9 .				2	11	2	
une, . December,		188	99.			٠	- 1	_	2 1	
une, . becember, ebruary, uly, .	ear,	185		:	:		2 - 1 1	11 - 5 6	1	17
une, . December, December, Debruary, Uly, . During the y		: :	:	CHES	:		- 1	- 5	1 -	17
une, . December, December, Debruary, Uly, . During the y		188		CHES			- 1	- 5	1 -	$\frac{17}{6}$
une, eccember, ebruary, uly,		S AND		CHES			1 1 2	- 5 6	1 1	$\frac{17}{6}$
une, recember, ebruary, uly, uring the y ugust,		S AND		CHES			1 1	5 6 317	1 2 -	17 -6 337
une, recember, ebruary, uly, uring the y ugust,		S AND		CHES	3.		1 1 2 1	5 6 317 249	1 1	337
une, recember, ebruary, uly, ruring the y cugust, eptember,		S AND		CCHES	3.		1 1 2 1	5 6 317 249	1 1 2 - 2 2	17 -6 337 -337 330
une, peecember, ebruary, uly, puring the y cugust, eptember, ovember, anuary, .		IS AND		CCHES	3.		2 1 1 1 - 2	317 249 68 -	1 - 1 2 - - 2 2 2	17 6 337 - 337 330
une December, ebruary, uly, . uring the y ugust, . eptember, ovember, anuary, . uly, .		IS AND		CCHES	3.		2 1 1 1 1 - 2 1	317 249 68 - 115	1 1 2 - 2 2	23 17 6 337 - 337 330 330
une, . eecember, ebruary, uly, . uring the y ugust, . eptember, ovember, anuary, . uly, .		IS AND		CCHES			2 1 1 1 - 2	317 249 68 -	1 - 1 2 - - 2 2 2	17 6 337 - 337 330
une December, ebruary, uly, . uring the y ugust, . eptember, ovember, anuary, . uly, .		ISS		CCHES			2 1 1 1 2 2 - 1 1	317 249 68 - 115 - 51 64	1 1 2 - 2 2 2 2 2	17 6 337 337 330 330
une		ISS		CCHES	·		2 1 1 1 2 2 - 1 1 1	317 249 68 - 115 - 51 64	1 1 2 - 2 2 2 2 2 - - - - - - - - - - -	17 6 337 330 330 - - - - - - - - - - - - -
une		ISS		CCHES			2 1 1 1 1 2 2 - 1 1 1 1 1 47 3	317 249 68 - 115 - 51 64 3,962 145	1 1 2 2 2 2 2 2 2 7	177 - 6 337 - 337 330 330
une December, Tebruary, uly, . uring the y cugust, . eptember, Tovember, anuary, . uly, . cugust, .		ISS		° · · · · · · · · · · · · · · · · · · ·	: : : : : : : : : : : : : : : : : : : :		2 1 1 1 2 2 - 1 1 1 47 3 3	317 249 68 - 115 - 51 64	1 1 2 - 2 2 2 2 2 - - - - - - - - - - -	177 6 6 337 2 330 330 330 6,434 457 2333
une. December, ebruary, uly, uring the y cugust, eptember, ovember, anuary, uly, cugust, ebruary, arch, cprtl,		ISS		CCHES			2 1 1 1 1 2 2 - 1 1 1 1 1 47 3	317 249 68 - 115 51 64 3,962 145 158	1	177 6 6 337 330 330 350 6,434 457 233 749 3644 364 364 364 364 364 364 364 364 36
une		ISS		CCHES	3.		2 1 1 1 2 2 - 1 1 1 47 3 3 2 1	317 249 68 - 115 51 64 3,962 145 125 43	1 2 2 2 2 2 2 2 - - 3 3 6 3 3	177 6 337 330 330 6,434 487 233 749
une. December, ebruary, uly, uring the y ugust, eptember, ovember, anuary, uly, anuary, ebruary, (arch, pril, (ay, une,		ISS		CCHES			2 1 1 1 - 2 2 - 1 1 1 1 1 1 1 1 1 1 1 1	317 249 68 - 115 - 51 64 3,962 145 158 125 43 - 170	1 - 1 2 - - 2 2 2 - - - 3 3 6 3 3	177 6 337 337 330 330 6,434 457 233 749 437
eptember, lovember, anuary,		ISS		CCHES			2 1 1 1 2 2 - 1 1 1 47 3 3 2 1	317 249 68 - 115 51 64 3,962 145 125 43	1 2 2 2 2 2 2 2 - - 3 3 6 3 3	17 -6 337 - 337 330

Indu	STRIE	s. Yı	EARS,	AND	Mo:	NTHS.			MENT OF	F EMPLOY- SMALLEST MBER	MENT OF	OF EMPLOY GREATEST MBER
2.120		,	,						Estab- lishments	Persons Employed	Estab- lishmen t s	Persons Employe
	Cı	сотн	ing –	- Co	n.							
		188	8 - C	on.					ļ			
October, .									1	87	4	390
November,	٠		•			٠	•	•	4	615	4	53'
December,	•	•				•	•	•	7	$\frac{498}{942}$. 7	65 94
During the y	ear,	•	•	•	•	•	٠	•	•	342		04.
		1	889.						47	4,067	47	6,64
r			.000						9	786	8	- 1,55
January, . February,	•	•	•	•	•	•	•	:	2	178	1 1	5
March, .	•	•	•	•	•	•		·	2	166	3	35
April,	Ċ	:	:			·			2	266	1 3	13
May,									1	45	4	26
June, .									3	212	2	74
July,			•						6	542	4	
August, .								•	7	506	4	77
eptember,	•	•		٠	•	•	•		4	118	5	43 50
october,	•	•	•	٠	•	٠	٠	•	1	91	3 5 3	52
November,	•	•	•	٠	•	•	•	٠	5	816	6	95
December, During the y	oor	•	•	•	•	•	•	•	5	341	5	34
Juling the y	car,	•	•	•	•	•	•	•				
COOKING, LI	GHTI	NG,	AND E	IEA7	FING	APP.	ARAT	us.			11	
			1888						2	177	2	21
			1000	•					_		1	4
ebruary,	•	•	•	•	•	•	•	•	1	42	1	3
April,	•	•	•		•	•	:	:	1 1	12	1	16
lune, . August, .	•	•	•	•	•	•	:	:	1	135	_	-
ragast, .	•	•	-	•								
]	1889.						2	187	2	20
January, .									_	_	1	4
February,	•	•	•	:	•	•	:	Ċ	1	43	_	
July,					i.				· -	_	1	16
October, .									1	144	-	
	α			m-					1			
	Cor		AND		VINE	•			12	1,577	12	2,75
		J	1888.	•					1	1	11	13
January, .	•	•	•	•	•	•	•	•	$\frac{2}{2}$	192 749	$\frac{1}{2}$	2
February,	•	•	•	•	•	•	•	•	2	149	3	35
March, .	•	•	•	•	•	•	•	:	1	\$ 56	-	"
April, . May, .	•	:	:	:	:		:			-	1	40
June,	÷	Ċ	Ċ	:	·			Ċ	_	_	3	1,10
July, .									1	180	1 =	
August, .									3	• 124		
September,									1	50	1 -	
November,	•	•	•	•		•	. •	•	1	89 137	1 1	4
December,	•	•	•	٠	•	•	•	•	1	151	1	*
			1889						12	1,860	12	3,3
January, .									2	515	1	
February,									-	-	1	
April, .									-	-	2	2.
May,		•			ь.		•	٠	1 7	239	1 1	68
June, .	•	•	٠	•	•	•	•	•	1	239 103		1,10
July,	٠	•	•	•	•	•	•	•	$\begin{array}{c} 2\\2\\1\end{array}$	$\frac{103}{244}$		1,10
August, . September,	•	•	•	•	•	•	•	:	l î	130		
October,	•	•	•	•	•	•	•	:	1	324	-	
November,	:	:	:	:	:	:	:	:	2	171	-	
December,	:								ī	134	4	9
		7	ON C	00-								
	•		on G		s.				100	50 901	136	66,6
			1888	•					136	59,801	11	
January, . February,						•	•	•	7 5	5,021 2,095	15 4	7,9 3,5

INDI	JSTRIE	s. Y	EARS.	ANT	Мо	NTHS			MENT OF	F EMPLOY- SMALLEST MBER	MENT OF	F EMPLOY GREATEST MBER
INDO	oim	20, 11	BANG,	Ant	, 110				Estab- lishments	Persons Employed	Estab- lishments	Persons Employe
	Сотт	on (Эоор	s —	Con							
		188	8-0	on.							i l	
March, .									2	1,317	3	2,216
April, .								•	4	1,404	3	1,439
May, .	•		•	•	•	٠		•	5 7	1,519 $1,625$	4 4	3,896 1,835
June, . July, .	:	:	•	:	:	:	:	:	16	6,334	4	3,66
August, .	Ċ	·			·	·			9	4,981	13	4,27
September,								٠	15	6,549	9	4,15
October, .	•	•	•	•	•	٠	•	•	8	1,852 4,453	10 10	5,496 3,486
November, December,	•	:	:	:	:	•	:	:	9	4,356	12	6,340
During the y	ear,	:			·	÷	·	:	45	18,295	45	18,29
											700	20.00
Lanuaur		1	889.						136 20	61,596 10,590	136 18	68,086 9,25
January, . February,	:	:	:	:	:	:	:	:	8	5,397	9	2,710
March, .						:	·		12	3,613	7	2,96
April, .								•	9	4,034	7	4,30
May, . June, .	•	:	:	•	:	•	:	:	2 7	$\frac{375}{2,370}$	8	1,20 4,31
July, .	:	:	:	:	:	:	:		11	3.782	8	3,61
August, .									7	3,836	8	3,16
September,								٠	11	7,520	9	3,42
October, . November,	•	•	•	•	•	•	•	•	9 7	$3,614 \\ 3,622$	11 11	7,60 8,27
December,	:	:	:	:	:	:	:	:	6	1,789	9	6,21
During the y	ear,								27	11,054	27	11,05
COTTON, V	Voor	TEN	ANT	Om	пгр	Теч	mer to	5				
COTTON, 1	, 002		888.		11111	1111	11111	•	2	2,095	2	2,30
February,									1	160	_	
October, .		:		:	·	:	÷	:	î	1,935	1	21
December,							٠		-		1	2,09
		1	889.						2	1,872	2	2,14
January, .											1	19
February,	÷	:	:	:	:	:	:	:	_	_	î	1,95
November,									1	1,721	-	· .
December,	•	•	•	٠	•		•	٠	1	151	-	
		Dyi	ESTUI	FFS.								
			1888.						1	28	1	30
April, .									-	_	1	30
December,	•		•	•	•		٠	٠	1	28	-	-
		1	889.						1	28	1	30
January, .									_	-	1	30
July, .	٠			٠	٠			٠	1	28	-	-
EMERY AN	ND SA	ND]	Раре	R A	ND (CLOT:	H, ET	·C.				
		1	ISSS.						2	43	2	56
January, .									-	-	1	18
February,									1	30	-	
June, .			٠		•		•	•	1	13	1 -	38
August, .	•				•				1	10	-	
		1	1889.						2	50	2	76
January, .									1	37	-	-
February,									1	13	1	17
July, . December,					. :			:	_	_	1	59
,											1	1

Ind	USTRII	es, ?	YEARS	, AN	ь Мо	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	PERIODS OF NU	OF EMPLOY- GREATEST MBER
									Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
		Fer	RTILIZ	ERS								
			1888						1	5	1	20
July, .				-					1	5	-	_
December,	•	•	٠	•	•		•	•	-	-	1	20
			1889						1	. 1	- 1	20
July, . September,	:	:	:	:	:	:	:	:	1 -	1 -	ī	20
FLA	s, Hi	EMP.	AND	Ju	re G	OODS	3.					
	-,		1888						3	822	3	892
March, .				٠.						_	1	96
June, .									1	30	1 2	_
August, .				•	•	•		•	1	42	- 1	46
December, During the y	ear.	:	:	:	:	:	:	:	ī	750	1 1	$\frac{46}{750}$
	•		1000						1 !			1.050
T. 1			1889	•					3	757	3	1,052
February, April, .	•	•	•	•	•	•	•	•	2 -	734	1	61
August,	:	Ċ	:	÷	÷	÷	÷	·	_	-	î	953.
September,		•							- 1	_	1	. 38
November,	•	•	•	•	•	•	•	•	1	23	-	_
at .	Foor	р P:	REPA:	RATI	ons.							
			1888	•					74	2,897	74	5,017
January, .									16	777	5	1,394
February,			•	•	•	•			2	228	1	21
March, . April, .	•	•	:	:	:	:	:	:	5 4	75 114	3 -	407
May, .									3	61	-	
June, .			•	•			•	•	4 7	1,089 61	1 4	13 371
July, . August, .	•	•	:		:	:	:	:	3	96	6	504
September.									_	-	7	712
October, .	•	٠					٠	٠	1	9	12	662 188
November, December,	•	:	:	:	:	:	:	:	4	61	3 7	419
During the y	ear,	÷		÷		÷			25	326	25	326
			1889						74	3,109	74	4,631
January, .				•					19	725	9	195
February,	:	:	÷.	÷		÷	:	:	_	-	2	53
March, .					•				3	44	-	53
April, . May, .	•	٠	•	•	•	•	•	•	3 7	334 442	2 4 2 2 4 5	132
June, .	:	:	÷	÷	÷	÷	Ċ	÷	5	83	2	20
July, .									5 2 2	852	2	213
August, .	•	•	•	•	•	•	•	٠	$\frac{2}{2}$	115	4 5	651 461
September, October,	:	:	:	:	:	:	:	:	- 1	3	. 6	521
November,									_	_	3	409
December,	•		•	•	٠	٠	•		1	10	4	1,422 501
During the y	car,	•	•	•	•	•	•	•	31	501	31	901
		Fu	RNITU	RE.								
			1888	•					47	2,572	47	3,259
January, .									11	339	3	176
February,	•	٠		•	•	•	٠	•	1	15	3	163 151
March, . April, .	•	:	:	•	:	:	:	:	2	81	5	305
May, .								:	1	68	3	92
June, . July, .	•	•	•	•		•			4	678	3 5 3 2 1	150
Juiv	•		•	•	•	•	•	•	8 4	279 · 265	1 1	35 45
August, .												

Inde	STRIE	s, Ye	ARS, A	AND	Мо	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	PERIODS OF MENT OF NU	OF EMPLOY- GREATEST MBER
		,							Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
	Fu	RNITU	JRE —	- Cc	n.							
		1888	8 — Co	n.								
September,					•		•		1	61	4	338
October, November,	:	•		:	•	:	•	:	1	74	8 3	350 972
December,	:	:		:	÷	:		:	1	272	1	42
During the y	ear,								10	440	10	440
		1	889.						47	2,236	47	2,949
January, .									17	561	2	77
February,					·	·	:		3	96	3 7	115
March, .				•				٠	-	-		560
April, . May, .	٠	•	:	•	:	:	:	:	1	46	4 3	164 75
June, .		:	:			:	:	:	1	20	5	214
July, .									6	585	1	4
August, .		•	•	•	٠	•	•	٠	5	187	<u>i</u>	60
September, October,	•	•	•	٠	:	:	:	:	- 1	67	3	195
November,			:		:	:	÷	:		-	1 4	187
December,									1	56	2	650
During the y	ear,	٠	•	•	٠	٠	٠	٠	12	618	12	618
		Gı	LASS.									
		18	888.						5	130	5	510
June, .	٠	•			. •		•	٠	4	120	1	43
July, . August, .	:	:			•	:	:	:	1	10		_
September,						·		÷		_	1	157
December,	٠				٠			٠	-	-	3	310
		18	889.						5	348	5	564
January, .									1	45	3	346
February,									-]	-	. 1	43
April, .	•	•			•	:	:	:	1	5	1 -	175
May, . June, .	Ċ				:	:		:	î	51	_	_
July, .									2	247	-	-
IIos	εį: R	UBBE	R, LI	NE	N, E	ETC.						
			888.						1	165	1	200
March, .									-	-	1	200
November,	•	٠				•	•	٠	1	105	-	-
		18	89.						1	110	1	180
March, . September,									~		1	180
		•			•	•	•	•	1	110	-	-
Ho	SIERI		Kni	т (Goo	DS.				1.000		
Tonnorr		18	888.						11	1,970	11	3,923
January, . February,	•				•		•	٠	3	49	2 1	516 110
March, .					:	:	:	:	1	63	-	110
April, .									1	106	1	583
	٠	•			٠	٠	•		$\frac{2}{1}$	401	2 2 2	177 98
June, .	:	:	: :		:	:	:	:	1	1,129 119	2	152
July, . October, .									1	43	1	2,287
July, . October, . November,					•	•	•	٠	1	60	-	_
July, October, . November,	:	•						1				
July, October, November, December,	:	18	89.						11	1,757	11	2,599
July, October, November, December,	:	18	89. 						3	152	-	-
June, July, July, October, November, December, January, February, April,	:	18			:	:	:				11 - 2 1	2,899 150 48

Industrie	s, Years, an	тр Мо	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	F EMPLOY- GREATEST MBER
INDUSTRIE	o, anano, Ai					Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
Hosiery A			— Co	n.					
-	1889 - Con							2	
June, August,		•	٠	•		3	1,133	2 1	777 44
September, .	: : :	:	÷	•		ĭ	81	-	-
November, .						1	43	3	1,675
December, .		•	•	•	•	ī	30	1 1	175 30
During the year,		•	•	•	•	1	50	1 1	50
	LEATHER.								
	1888.					96	3,629	96	5,286
January,						9	312	12	582
February, .				•		6	114	1	104
March,		٠	•	•	•	5	287	1 0	98 167
April, Iay,		:	•	:	:	7 6	148 391	6 3	81
une,		:	:	:	:	6	340	6	215
uly,						7	$247 \cdot$	+	264
August,					•	7	111	8	310
September, . October,		•	•	•	:	5 3	120 60	6	379 319
Vovember,		:	:	:	:	5	223	6	406
December, .						10	278	19	1,363
During the year,		•	•	•	٠	20	998	20	998
	1889.					96	3,609	96	5,356
anuary, .						20	808	20	1,056
ebruary, . Iarch,				•	•	3	53	7 6	315 434
pril,	: : :	:		:		5	310	6	194
ſay,						6	132	2	107
une, .			•			5	415	4	183 360
uly, August,		:	•	•	۰	4 4	194 160	6	106
eptember, .		:	:		•	10	337	4	235
October,						4	172	6	486
Vovember, .					•	7	102	6 9	408 899
December, . During the year,		:	:	:	:	9 19	353 573	19	573
3 ,									
	Linen.					3	870	3	1,020
anuary,	x000.					2	621		.,020
fay,		:	:	:	:		021	1	293
une,						- 1	-	2	727
Tovember, .			•	•	٠	1	249	-	-
	1889.					3	858	3	958
anuary,						-	-	1	300
'ebruary, .						1	243	-	-
une,			•	•	٠	1	385	_	256
uly, October,			•	:		1	230	1	200
November, .		÷	:			_	_	1	402
liquors: Malt,	Distilled,	AND :	FERM	ENTEI	٥.				
	1888.					23	568	23	748
anuary,						3	104	-	-
February, .						1	4	-	-
March,		•			٠	1 1	24 57	1 1	50
April,				•		1 1	94	1 1	90

${\tt MONTHS-1888,\ 1889-Continued.}$

INDUSTR	es, Years,	AND 3	Mont	HS.		MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	GREATES:
, INDUSTR	Es, TEARS,	AND I				Estab- lishments	Persons Employed	Estab- lishments	Persons Employe
Liquors: Malt	, DISTILLE		D FE	RME	NTED				
	1888-0								
Мау,	1999 .					2	62	_	_
June,						3	31	2	89
July,				•		-	-	3 3	69
August,			•			i -	_	3	155
September, . October,		•	•	•	•	1	25	1 3	$\frac{71}{120}$
November, .	•		•			i	10	$\frac{2}{2}$	5-
December, .		:				$\tilde{4}$	123		1-
During the year						6	128	6	128
	1889					23	587	23	719
anuary,						5	169	3	81
'ebruary,			:		:	2	76	-	-
farch,						1	16	2	12
lay,			•			2	16	-	
une,			•			1	50	2 1 2 1	6: 6:
uly,		•	•	•		ī	24	2	8
eptember, .	: :	:	:	•	:			l î l	1
ctober,						-	-	1	4:
ovember, .						1	30	1	39
uring the year		•	•	•		10	206	10	20
	LUMBE	R.							
0	1888					1	16	1	28
April,						- 1		1	28
November, .		•	•	•	•	1	16	-	-
	1889					1	5	1	16
Iarch,						1 -	_	1 1	10
uly,				•		1	5	_	
Magur	NES AND	VI vetit	NTTPS						
MACHI	1888		IN ELE	•		84	9,218	84	11,53
auuary,						11	1,143	6	49
ebruary, .						4	237	5	12
larch,						2	221	7 7	76
pril,		•	•	•		3	108	7	1,99
lay,		٠.	•		•	9	2,107 613	4 5	21 88
une, uly,		:	:			11	865	3	30
ugust,	: :					6	1,494	6	61-
eptember, .						2	80	4	75
ctober,						2 7	37	4	32
lovember, .				•			305	6 18	80. 3,19
December, . During the year		:	:			9 9	955 1,053	18	1,05
		i	-	-					
	1889	•				84	9,849	84	12,19
anuary,		•		•		27	3,340	9	1,24 55
ebruary, Iarch		•	•		:	0	376 1,094	9	97
April,	: :	:	:		:		1,150	6	39
lay,						4 2 5	110	5 4	1,07
une,						5	119	4	43
uly,				•		4	751	6 7	1,68
August,			•		•	6 4	493 271	7	80 32
September, . October,		:	:	•	•	1 4	176	1 7	1,01
						7	110		49.71

Industrie	s, Y1	CARS.	ANI	мо	NTHS.			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	OF EMPLOY GREATEST MBER
			,					Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
Machines	AND 188			ERY	— C	on.					
November, .			· ·					5	405	8	723
December, .	•	٠		٠	•	•	•	6 5	1,377	11	2,799
During the year,	•	•		•	•	•	•	9	157	. 5	157
METALS A	ND .	Мет	ALLI	c G	oods						
	1	SSS	•					122	11,152	122	14,080
January,								12	867	16	948
February, . March,	•	•	•	٠	•	•		7 5	439 300	4 8	214 1,038
April,	:	:	:	:	:	:	:	5	155	8	611
May,								17	982	4	520
June,			•		•	٠	٠	10	1,245	8 12	4,116
July, August,	•		•	•	•	•	:	21 5	1,512 138	7	750 1,083
September, .	:		:	:	:	:	:	5	195	6	385
October,								5	585	10	827
November, .		•		•	•	•	•	6 7	504	9	1,455
December, . During the year,	:	:	:	:	:	:	:	17	3,184 1,046	17	1,087 1,046
									-		
,	1	889	•					122	11,396	122	14,421
fanuary, February,		•	•	•	•	٠	•	13	3,659 521	24	1,531 850
farch,	:	:	:	Ċ	Ċ	:	:	4	314	3	286
April,								11	537	4	557
Iay,	•	•	•	•		•	•	14	1,168	3	409
une, uly,	•	•	•	•	•	•	•	12 12	1,102 958	5 5	438 385
August,	:	÷	:	Ċ		:		12	1,221	6	340
September, .								7	293	10	778
October,	٠	٠	•	•	•	•	•	$\frac{2}{2}$	148	11 6	1,418
November, . December, .	:	:	:	:	:	:		10	117 575	21	506 6,140
During the year,						•	o	14	783	14	783
Mi	XED	TE:	נדדים	28.							
		888						11	914	11	1,138
anuary,								1	23	2	69
ebruary, .									_	1	51
farch,					•		•	- 1	-	1	142
ipril,	:	:	•	•	•	•		1 1	86 138	- 1	350
uly,	:	:	:	:	÷	:		2	82	1	95
eptember, .								-	-	2	229
October, Tovember, .	٠	٠	•	•	•	•	•	1 1	16 34	-	
December, .	:	:	:	:	:	:	:	2	369	1	36
During the year,					•			2	166	2	166
	1	889						11	870	11	1,052
anuary,							.]	2	292	1	37
farch, April,	•	•	٠	•	٠		•	1 1	15 50	3	284
lay,	:	:	:	:	:	:		- 1	-	1	46
uly,								1	35	- 1	-
Lugust,	٠	٠	•		٠			1	24	1	97
September, . October,	:	:	•	•	•	•	ا : ا	3	305	1 1	311 85
Tovember, .	:	:	:	:	:	:		_	_	î	20
December, .							•	1	* 24	1	47
During the year,				•		•	•	1	125	1	125

	-		-	_	-			_				
Indi	JSTRIE	s, Y	EARS,	ANI	э Мо	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	F EMPLOY- GREATEST MBER
									Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
	-											
MUSICAL	INST				D M.	ATER	IALS.					
			1888						23	2,009	23	2,397
January, .									2	202	-	-
February,									2	55	l - /	
March,	•	•						•	1	80	1	351
April, . June, .	•			٠				:	3	296	_	_
July, .	:	:	:	:	:	:	:	:	4	616	1 1	50
August, .									2 2	115		_
September,		٠							2	346	2 2	131
October, .	•	٠		•	•	•		٠		_ :	3	181
November, December,	•	•	•	•	÷	:	:	:	1	27	8	538 874
During the y	ear,	Ċ		Ċ	÷			:	6	272	6	272
•												
			1889	•					23	2,088	23	2,481
January, .									7	579	3	187
February,		٠				٠		٠	1	62	-	-
March, . May, .	•	•	٠	•	•	•	•	•	2	154	$\frac{1}{2}$	63 295
June, .	:	:		:	:	:	:	:	2	137	1	50
July, .	·								$\frac{2}{2}$	124	- 1	-
August, .									1 1	44	1	53
September,		•		•	•	٠		٠	1 1	35	3 2	225
October, . December,	•	•	•	•	•	•	•	٠	1	269	1 . 4	141 783
During the y	ear.	:		÷	:	÷	:	:	6	684	6	684
Oirs	AND	ILL	UMIN.	ATIN	G F	UID	3.					
			1888	•					1	25	I	43
July,			٠						1	25	- 1	43
November,	•	•		•		•	•	•	-	_	1	40
			1889						1	23	1	44
January, .									- 1	_	1	44
July, .	•	•	٠		•		•	•	1	23	-	-
p	DVD	ABIT	PAF	ar D	Goo	0.0			İ			
*	11 216		1888.		000.	0.0*			68	6,474	68	7,224
Tonnores			2030	•					6	515	2	
January, . February,	:	:			:			:	0	919	2	166 208
									4	463	5	507
March, .									3	110	1	295
March, . April, .					٠	٠		•	5 4	818 367	6	815
March, . April, . May, .	٠							:	11	1,187	3	426 427
March, . April, . May, . June, .		•						:	2	61		250
March, . April, . May, . June, . July, .	:	:	:	:	:							
March, April, May, June, July, August, September,	:	:	:	:	:		:		1	105	2 3	470
March, April, May, June, July, August, September, October,	:	:	:	:	:		:	:	3	105 146	9	470 541
March, April, April, May, June, July, August, September, October, November,	:	:		:					3 6	105 146 494	9 3	470 541 314
March, April, May, June, July, August, September, October, Overmber, December,	· · · · · · · · · · · · · · · · · · ·			:				:	3	105 146 494 372	9	470 541 314 1,469
March, April, May, June, July, August, September, October, Overmber, December,	· · · · · · · · · · · · · · · · · · ·		:					:	3 6 5 18	105 146 494 372 1,836	9 3 10 18	470 541 314 1,469 1,836
March, April, April, June, June, July, August, September, October, November, December, During the y	· · · · · · · · · · · · · · · · · · ·		1889	:				:	3 6 5 18	105 146 494 372 1,836	9 3 10 18 68	470 541 314 1,469 1,886
March, April, May, June, July, August, September, October, November, December, During the y	· · · · · · · · · · · · · · · · · · ·		:	:				:	3 6 5 18 68 12	105 146 494 372 1,836	9 3 10 18 68	470 541 314 1,469 1,836 7,387
March, April, May, June, June, July, August, September, October, November, December, During the y January, February,	rear,		:		:			:	3 6 5 18 68 12 6 7	105 146 494 372 1,836 6,487 981 462 672	9 3 10 18 68 12 5 6	470 541 314 1,469 1,886
March, April, May, June, June, July, August, September, October, November, December, During the y January, February, March, April,	rear,		:		:			:	3 6 5 18 68 12 6 7	$ \begin{array}{c} 105 \\ 146 \\ 494 \\ 372 \\ 1,836 \\ 6,487 \\ 981 \\ 462 \\ 672 \\ 164 \end{array} $	9 3 10 18 68 12 5 6	470 541 314 1,469 1,836 7,387 1,330 616 819
March, April, May, June, June, July, August, September, October, November, During the y January, February, March, April, May,	rear,		:		:				3 6 5 18 68 12 6 7 3	105 146 494 372 1,836 6,487 981 462 672 164 302	9 3 10 18 68 12 5 6 3 2	470 541 314 1,469 1,836 7,387 1,330 616 819 215
March, April, May, June, July, August, Cottober, November, During the y January, February, March, April, May, June,	rear,		:						3 6 5 18 68 12 6 7 3 3 4	105 146 494 372 1,836 6,487 981 462 672 164 302 228	9 3 10 18 68 12 5 6 3 2	470 541 314 1,469 1,836 7,387 1,330 616 819 215 365 483
March, April, May, June, June, July, August, September, October, November, During the y January, February, March, April, May,	rear,		:		:				3 6 5 18 68 12 6 7 3	105 146 494 372 1,836 6,487 981 462 672 164 302	9 3 10 18 68 12 5 6 3 2	470 541 314 1,469 1,836 7,387 1,330 616 819 215

Indu	STRIE	s, Y	EARS	, ANI	мо	NTHS.			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	F EMPLOY- GREATEST MBER
		-, -		,					Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
PAPE	R AN	р P.	APER	Go	ons -	- Coi	a.					
			9-0									
September,				•					1	178	8	788
October, .				. •					2	462	8	648
November,	•	•	•	•	•	•	•	•	1	223	2	117
December,	•	•	•	•	•	•	•	•	5 10	608 798	- 4 10	453 798
During the y	ear,	•	•	•	•	•	•	•	10	198	10	190
PRINT WORL	ks, D	YE V	Vori	ïS, A	ND E	BLEAG	HER	ŒS.				
		:	1888						16	3,224	16	4,728
January, .									2	397	1	616
March, .									1	522	2	185
April, .									1	237	1	860
May, .	•		•	•		•			1 1	51	2	685
June, .	•	•	•	•	•		•	٠	1 1	210	1	166
July, .	•	•	•	•	•	•	•	•	3 2	348	2	308
August, . September,	•	•	•	•	•	•	•	:	2 -	224	2	194
October, .	:	•	•	•	•	•	•	:		_	2	778
November,	Ċ	÷	·	·	·	÷	:	:	4	1,123	ī	616
December,									-	-	1	208
During the y	ear,								1	112	1	112
			1889						16	3,653	16	4,640
T .			1000	•					!			
January, .	•	•	•	•	•	•	•	•	1 1	124 49	3	1,383
February, April,	•	•	•	•	•	•	•	:	1 1	49	1 1	85
May,	:	:	:	:	:	•	:	:	4	878	i	129
Juue, .									-	-	2	192
July, .									. 2	665	1	453
August, .									1	219	1	244
September,	•		•	•	•			•	1	142	1	59
October, .	•	•	•	•	•	•	•	•	4	1,473 43	2 1	784 156
November, December,	•	•	•	•	•	•	•	•	1 1	60	3	1,155
•		•	•	•	٠.		•	•	-			-,
RAILROAD	Con				ND I	EQUIT	MEN	т.				
			1888						1	13	1	46
January, . October, .	•	٠	•	٠	•	•	•	٠	1	13	1	46
October, .	•	•	•	•	•	•	•	•		10		
			1889	٠.					1	38	1	53
February,									-	-	1	53
September,	•	•	•	•	•	•	•	٠	1	38	-	-
Rue	BER	ANI	EL	ASTIC	Go	ods.						
			1888						20	5,246	20	6,482
January, .									1	50	!	_
February,	:	:	•	•	•	:	:	•	i	960	2	237
March, .									- 1	- 1	2	71
April, .									1	930	1	225
May, .					•			•	1 1	1,953	- 1	070
June, .	•	٠	٠	•	•	•	٠	•	5 2	342 48	1 2	316 117
July, .	•	٠	•	٠	•	•	٠	٠	1 1	48 9	1 1	86
August, . September,	•	•	•	•	•	. •	•	:		9	1	152
	:	:	:	:	:	•	:	:	1	143	2	1,245
October								·	î l	13	2	1,316
October, . November,									3	555	3	2,474
November, December,									3	243	3	243
November,	ear,		•									
November, December,	ear,		i gen						20	5.087	20	6.843
November, December, During the y	ear,		1889						20	5,087	20	6,843
November, December,	ear,		1889	•					20 3	5,087 341	20 3 2	6,843 147 1,087

Ixpu	STRIE	s, Yı	EARS	, ANI	o Mo	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	OF EMPLOY GREATEST MBER
11.00	~****		D1816 .0	, 21112	, 1110	., ., .,			Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
Rubbei	R AN	D EL	AST	ıc G	oods	s — C	on.					
		188	9 —	Con.								
April, .									2	1,114	1	159
May,		•	•	•	•	•	•	•	4	2,458		_
July,	•	•	•	•	•	•	٠	•	5	316	1	71
August, September,	•	•	•	•	•	•	•	:	1 1	$\frac{105}{310}$	1	112
October, .	:	:	:	:	:	:	÷	:		-	1 1	470
November,									1	-	4	4,155
December,									1	131	1	330
During the y	ear,	•	٠	•	•	•	•	٠	3	312	3	312
	£	нгы	BUIL	DING	ž.							
		1	888						6	307	6	845
January, .									1	94	1	70
June, .									-	-	2	373
July,	٠	•						•	1	10	-	-
August, .		•	•	•	•	•	•	٠	1 1	9	1	185
September, December,	•	•	•	•	:	:	:	:	2	7	1	30
During the y	ear,	÷	:	:	÷	÷	·	:	ī	187	i	187
		,	889						6	319	6	582
Tanuauu		•	333	•					1			
January, . February,	•	•	•	•	•	•	•	•	1	15	$\frac{1}{2}$	45 366
Mav.	:	:	:	:	•	•	:	:			i	25
July,									1	28		
September,									1	11		_
November,						•.			1	119	-	-
During the y	ear,	•	٠	•	•	•	•	•	2	146	2	146
8	SILK	AND	SIL	кG	OODS	3.						
		1	888	•					7	2,108	7	2,488
January, .									1	407	- 1	_
February,						•			-	-	1	542
March, .		•	٠	•	•	•		•	-	-	1 1	132
May, June, .		:	•	•		•		•	-	_ i	3	638 626
July,	:	:	:	:	:	:	:	:		618		020
August,			:		:	:	:	÷	3 2	1,035		_
October, .									- 1	· -	1	550
December,	٠	٠	•	٠	•	٠	•		1	48	-	-
		1	889						7	2,156	7	2,871
January, .									1	121	- 1	-
February,									-	-	2	598
April, .									-	-	2 2 1	800
May, .		•		•			•		-	-		360
June, . Inly		•		•	•	•	•	:	1 1	56 325	-	_
July, . August, .	:	:	:		:				1	684	-	_
October, .			:		Ċ	Ċ	:		1	44	1	155
November,					·				1	468	- 1	-
During the ye	ear,	•	٠	•					1	458	1	458
		S	PONE	· .								
			888						19	1,034	19	1,548
January, .									6	276	-	_
February,									4	105	-	-
May,				٠					1	33	1	160
June, .				٠				•	-	_	2	492
July, .									-	-	6	324

Inde	saan	ĸs, I	Y is a re	s, Ani	о Мо	NTHS			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	OF EMPLOY GREATEST MBER
		,		,					Estab- lishments	Persons Employed	Estab- lishments	Persons Employee
		STO	NE-	- Con								
		18	NN	Con.								
August, .									-	~	3	216
September, October, .	•	•	•	•		•	•	•	1	-	$\frac{2}{2}$	273
November,	:	•	•	•		•	:	:	3	$\frac{24}{362}$	3	115 278
December,			÷		÷	·	÷	:	4	234	_	210
			1885	'a					19	920	19	1,480
January, .									8	423	_	1,400
February,	:	:	:			:	:	:	2	62	1	202
March, .									ī	35	2	83
April, .				:					-		4	243
May, .					٠	٠			1	93	1	50
July, . August, .	•	•	•	•	•	•	•	•	1	7 125	2 3	153 185
September,	:		:			•		:	1 1	120	3	328
Detober, .								·	_	_	ĭ	135
November,									1	25	-	-
December, During the y	enr.	•	•	٠		•			$\frac{2}{2}$	49 101	- 2	101
		٠.		·	•	•	•	•	-	101	-	101
STRA	W A	(1)	'ALM		F C	OODS	٠.		16	304	16	3,364
January, .			,.,.	•					10	004	4	708
ebruary,	:	:	:		:		:	:			2	700
darch, .					·		Ċ		_	-	2	508
\pril, .									- #	-	2	375
Jay,	•		•	•	٠	•			-	-	1	300
June, . July, .	•	٠		•	•	•	•	:	1 5	50 68	-	-
August, .	:	:		:	:	:	•	: 1	3	31	_	
September,								.	3	77	- 1	-
etober, .									2	27	1	165
Jecember,	•	•	•	•	٠	•		.	2	51	4	608
			1889	٠,					16	422	16	3,128
lanuary, .								.	_	- 1	5	806
ebruary,			•	•				.	-	-	3	933
Iarch, .	٠	•	٠	•		•	•	.	-	-	2	349
April, . une, .	:	:	:	•	•	•	•		6	151	3	607
uly, .			:	:	:	:	:		5	121		_
eptember,									3	76	-	-
lovember, December,	:	:	٠	•	•	•	•	•	1	45 29	-	433
	•	•	•	•	•	•	•		1	J-17		
TALLOW,	CAN		s, S Isss		AND	GRI	EASE,		13	403	13	488
annary, .								.	2	26		_
'ebruary,								:	-	-	1	59
une, .									1	50	1	24
uly, .	•	٠	•	•	•	٠	٠	.	1	11	2	137
Lugust, . eptember,	•	:	•	•	•		•	:	2	78	1	9
lovember,	:	:	:	Ċ	:	:	:	:	-	12	1	93
December,				÷		:		:	3	86	1	14
ouring the yo	ur,	٠	•	٠	٠	٠			6	152	6	152
		1	INNS						13	428	13	536
lanuary, . Tebruary,								. 1	6	206 12	2	65

MONTHS-1888, 1889—Continued.

Indu	STRII	es, 1	ČEARS	, AND	Мо	NTHS.			MENT OF	F EMPLOY- SMALLEST MBER	MENT OF	OF EMPLOY GREATEST MEER
		,		,					Estab- lishments	Persons Employed	Estab- lishments	Persons Employed
TALLOW, CA	NDL		SOAP 89-		Gı	REASE		on.				
March, .				Con.					1	22	1	43
April, .									- 1	-	1	4
May, . June, .	٠	٠	•		٠	•	٠	:	1	49	2 2	49 71
July, .		:	:	:	:	:	:	:	1	8	-	- 11
August									-	-	2 1	64
November, December,	•	•	•	•		•	•	:	· - 1	38	1	147
During the y	ear,	:	÷	÷	:	÷	:	:	2	93	2	93
Wii	IPS,	Las	HES,	AND	ST	ocks.			*			
			1888	i.					1	69	1	104
July,									7		1	104
December,	•	•	٠	•	٠		•	•	1	69	-	-
			1889						1	63	1	68
August, .				. 6					1	63	-	_
September,		•	٠	٠	٠	•	٠	٠	-	-	1	68
	T	001	DEN (Joon	s.							
			1888						17	668	17	1,140
lanuary, .									4	186	-	_
February, March,		•	•	•	•		•	•	4	77	_ 2	194
April, .	:	:	:	:	:	:	:	:	1	62	1	23
July, .									-	-	2	181
August, . September,	•	٠	•	٠	•	•	•	:	2	17	2 2 2 2	71 159
October, .	:	:	:	:	:	:	:	:	1	76	2	224
November,									. -		1	9
December, During the y	enr	•		٠	•		•	:	3 2	150 100	3 2	179 100
Juring the y	car,	٠	•	•	٠	•	•	•		100	- 1	100
			1889	•					17	782	17	1,014
lanuary, . April, .	•	•	•	•	•	•	•	•	6	260 21	ī	26
lay,	:		:	:			:	:		-	1 1	20 32
lune, .									- [-	1	110
uly, August, .		•		•			•	٠	1	7	3	98
eptember,	:	:	:	:	:	:	:	:	4	194	1	38
otober, .		i.	·				i.		-	-	$\hat{2}$	193
November,			•				٠			-	$\begin{bmatrix} 2\\1\\2 \end{bmatrix}$	87
December, During the y	ear,	:	:	:	:	:	:	:	5	300	5	130 300
	w	OOLI	LICK	Good	ā							
	,,		ISSS		.,,				86	12,613	86	14,668
fanuary, .									5	1,727	6	2,023
ebruary,									6	1,162		1,115
Jarch, . April, .					•			•	3	157 928	2 2 3	120
day,	:	:	:	:	:	:	:	:	3	229	8	678 969
une, .								:	3	341	1	45
fuly, .				•	٠				13	2,046	2 4	534
August, . September,	•	•	٠	٠	•	•	•		7 3	1,455 296	4 5	390 1,266
Detober, .	:	:	:	:	:	:	:	:	5	520	4	1,266 586
November,									3	395	4	537

Ini	OUSTRIE	s, Y	EARS	, AND	Mo:	NTHS.			MENT OF	OF EMPLOY- SMALLEST MBER	MENT OF	F EMPLOY GREATEST MBER
		,		•					Estab- lishments	Persons Employed	Estab- lishments	Persons Employee
	Woor	LEN	God	ods –	- Cor	1.						
		18	88-	Con.								
December,									1	140	14	3,197
During the	year,	•_	•	•	•		•	•	31	3,217	31	3,217
•			1889						86	12,751	86	15,013
January, .									15	2,292	13	1.574
February,	·	Ċ		•	·	·	·	·	4	503	6	829
March, .									5	367	4	684
April, .									- 1	_	11	1,578
May, .									4	498	6	833
June, .									. 7	2,359	2	589
July, .				٠.					7	1,096	5	1,560
August, .									4	491	3	409
September,	, .								6	469	2	320
October, .									5	864	8	1,905
November,									6	1,102	6	1,60
December,									7	842	4	1,259
During the	year,		•	•	•	•	•	•	16	1,868	16	1,868
	w	ORS	TED	Gaar	25					•		
	"		1888		,,,,				16	2,547	16	3,433
January, .									2	86		.,
Tebruary,	•	•	•		•	•	•	•	$\frac{2}{2}$	624	2	707
March, .	•	•	•	•	•	•	•	•		024	2	164
April, .	•	•	•	•	•	•	•	•	1	10	ī	126
Jay,	•	•	•	•	•	•	•	•		10	2	421
Tune,	•	•	•	•	•	•	•	•	2	454		421
uly,	•	•	•	•	•	•	•	•	2 4	593	_	_
August, .	:	:	:	•	:	:	:	:	3	508	1	44
eptember,	•	:	•	•	:	•	•	•	-	-	i	73
ctober,		:	·	:	·		:		1	207		
November.									l î l	65	3	1,020
December,										_	4	878
			1889						16	3,102	16	3,616
			1999	•					1			•
anuary, .	•	•	•	•	•	•	•	٠	4	542	4 1	333
ebruary,	•	٠	•	•	•	٠	•	•	1 1	$\frac{216}{344}$	1	170
Iarch, .	•	•	•	•	•	•	•	٠	i	634	1	343
une,	•	•	•	•	•	•	•	•	$\begin{vmatrix} \frac{1}{2} \end{vmatrix}$	543	1 1	243
ule, .	•	•	•	•	•	•	•	•	3	354	1 1 1	122
August, .	•	٠	•	•	•	•	•	•	1	21	2	1.063
eptember,	•	•	•	•	•	•	•	•	1	7	i	92
eptember, October, .	•	•	•	•	•	•	•	•	1 1	339	2	107
November,	•	•	•	•	•	•	•	•	i	102	í	544
December,	•	•	•	•	•	•	•	•	1 1	102	2	599
recember,	•	•	•	•	•	•	•	•	-	-	4	999

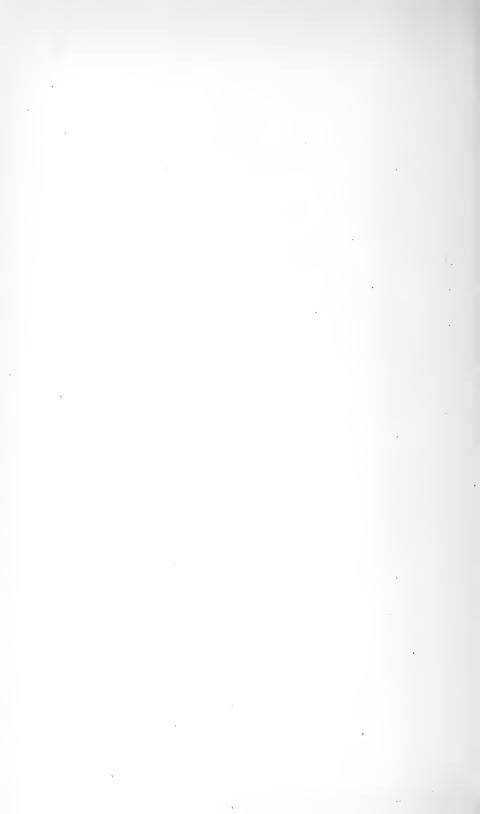
,	YEA	RS A	AND I	Mont	us.		MENT OF	OF EMPLOY- SMALLEST MBER	Periods of Employ- MENT OF GREATEST NUMBER		
						 	Estab- lishments	Persons Employed	Estab- lishments	Persons Employee	
		1	1888				1,364	169,610	1,364	221,307	
Јавиагу,							135	15,110	112	21,456	
February, .							66	8,339	45	9,166	
March,							- 44	4,570	92	11,803	
April,							65	6,782	73	12,747	
Мау,							81	11,060	56	10,729	
June,							95	10,791	90	16,260	
July,							176	19,155	87	12,597	
August,							89	12,137	94	14,398	
September, .							55	11,017	94	14,078	
October,							57	8,193	114	17,189	
November, .							109	13,879	87	17,87	
December, .							138	15,430	166	29,87	
During the year	r,						254	33,147	254	33,147	
		3	1889				1,364	176,097	1,364	221,449	
January,							292	35,105	193	27,370	
February, .							72	10,353	77	11,700	
March,							62	7,935	87	14,611	
April,							61	11,524	91	12,82	
Мау,							69	9,841	67	8,399	
June,							77	10,236	69	11,806	
July,							115	14,240	72	13,539	
August,							91	11,673	87	15,323	
September, .							85	12,869	83	11,98	
October,							53	9,432	99	19,230	
November, .							67	11,079	74	21,393	
December, .							75	8,394	120	29,853	
During the year	٠.						245	23,416	245	23,416	

AGGREGATES BY MONTHS-1889.

	Industries.		Number of Estab- lishments		E NUMBER O	
			Con- sidered	January	February	March
1	Agricultural implements,		5	657	663	664
2	Arms and ammunition,		10	1,597	1,627	1,727
3	Artisans' tools,		8	721	727	719
4	Boots and shoes,		291	27,473	28,228	28,771
5	Boxes (paper and wooden),		23	1,165	1,197	1,210
6	Burial cases, caskets, coffins, etc.,		1	26-	26	29
7	Buttons and dress trimmings,		4	168	192	239
8	Carpetings,		5	4,084	4,080	4,163
9	Carriages and wagons,		19	947	969	1,026
10	Chemical preparations (compounded), .		2	18	23	22
11	Clocks and watches,		2	330	326	327
12	Clothing,		47	5,451	5,502	5,712
13	Cooking, lighting, and heating apparatus, .		2	204	203	203
14	Cordage and twine,		12	2,594	2,806	2,918
15	Cotton goods,		136	65,390	65,454	64,523
16	Cotton, woollen, and other textiles,		2	2,111	2,138	2,007
17	Dyestuffs,	*	1	30	30	30
18	Emery and sand paper and cloth, etc.,	•	2	52	52	50
19	Fertilizers,	:	1	3	3	3
20	Flax, hemp, and jute goods,		3	799	780	799
21	Food preparations,	•	74	3,661	3,743	3,745
22	Furniture,	:	47	2,595	2,654	2,715
23	~ .		5	432	487	518
24	Hose: rubber, linen, etc.,	•	1	167	170	180
25		•	11	2,279	2,301	2,346
26	Hosiery and knit goods,	•	96	4,523	4,673	4,738
27	Linen	•	3	940	933	925
28	,	•	23	635	615	634
	Liquors: malt, distilled, and fermented, .	•		11	12	16
29	Lumber,	•	1 84			11,120
30	Machines and machinery,	•	122	11,050	11,028 12,687	12,646
31	Metals and metallic goods,			12,720	, ,	
32	Mixed textiles,	•	11	917	920	953
33	Musical instruments and materials,	•	23	2,235	2,241	2,248 41
34	Oils and illuminating fluids,	•	1	44		
35	Paper and paper goods,	•	68	6,960	6,960	6,935
36	Print works, dye works, and bleacheries, .		16	4,475	4,371	4,211
37	Railroad construction and equipment,	•	1	47	53	52
38	Rubber and elastic goods,		20	6,522	6,435	6,383
39	Shipbuilding,	•	6	414	562	364
40	Silk and silk goods,	•	7	2,257	2,299	2,302
41	Stone,	•	19	1,282	1,045	1,148
42	Straw and palm leaf goods,	•	16	2,708	2,975	2,904
43	Tallow, candles, soap, and grease,	٠	13	411	440	473
44	Whips, lashes, and stocks,	•	1	66	66	66
45	Wooden goods,	•	17	827	870	893
46	Woollen goods,	• '	86	13,965	14,115	14,344
47	Worsted goods,	•	16	3,357	3,342	3,340
48	ALL INDUSTRIES,		1,364	199,353	201,067	201,382

AGGREGATES BY MONTHS-1889.

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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	30 2
1,205 1,229 1,218 1,196 1,195 1,170 1,208 1,207 1,208 220 228 226 220 201 196 4,212 4,274 4,200 4,084 4,410 4,122 4,212 4,274 4,200 4,084 4,100 1,124 1,085 1,007 1,000 1,012 1 1,11 12 12<	79 8
1,205 1,229 1,218 1,196 1,195 1,170 1,208 1,207 1,207 1,207 1,207 1,208 1,207 1,208 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 27 28 26 26 26 201 196 4,117 3,646 4,109 4,122 4,212 4,274 4,200 4,084 4,084 4,084 4,084 4,084 4,081 1,000 1,010 1,010 1,010 1,010 1,000 1,000 1,000 1,000 1,000 1,000 1,000 298 298 299 298 299 248 2,333 2,4 2,533 2,4 2,533	32 4
28 28 28 28 30 29 28 26 200 201 141 138 185 204 201 196 4,171 3,646 4,109 4,122 4,212 4,274 4,200 4,084 4, 1,082 1,131 1,156 1,124 1,085 1,007 1,000 1,012 20 15 13 11 12 12 12 12	99 5
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1,082 1,131 1,156 1,124 1,085 1,007 1,000 1,012 20 15 13 11 12 299 28 28 2,148 2,333 2, 2, 29 29 28 28 28	75 7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	86 8
324 310 299 295 117 293 298 299 5,453 5,548 5,622 5,054 5,115 5,533 5,742 5,664 5, 202 203 204 206 193 189 188 194 3,024 3,086 3,102 2,871 2,104 1,985 2,248 2,333 2, 65,674 65,748 65,685 65,420 65,324 65,279 65,425 65,567 65, 2,038 1,933 1,924 1,963 2,011 1,990 1,894 2, 30 30 29 28 28 28 29 29 53 54 54 55 57 66 61 60 3 3 3 3 1 1 20 20 3 901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,6	9 9
5,453 5,548 5,622 5,054 5,115 5,533 5,742 5,664 5, 202 203 204 206 193 189 188 194 3,024 3,086 3,102 2,871 2,104 1,985 2,248 2,393 2, 65,674 65,748 65,685 65,420 65,324 65,279 65,425 65,567 65, 2,038 1,993 1,924 1,924 1,963 2,011 1,990 1,894 2, 30 30 29 28 28 28 29 29 53 54 54 55 57 62 61 69 3 3 3 1 1 20 20 3 901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, <tr< td=""><td>11 10</td></tr<>	11 10
202 203 204 206 193 189 188 194 3,024 3,086 3,102 2,871 2,104 1,985 2,248 2,393 2, 65,674 65,748 65,685 65,420 65,324 65,279 65,425 65,567 65, 2,038 1,933 1,924 1,924 1,963 2,011 1,990 1,894 2, 30 30 29 28 28 28 29 29 53 54 54 55 57 62 61 60 3 3 1 1 20 20 3 901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, 2,720 2,725 2,649 2,491 2,428 2,632 2,754 2,771 2,	S 11
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	14 12
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	9 13
2,035 1,933 1,924 1,924 1,963 2,011 1,990 1,894 2,89 30 30 29 28 28 28 29 29 53 54 54 55 57 62 61 69 3 3 1 1 20 20 3 901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, 2,720 2,725 2,649 2,491 2,428 2,632 2,754 2,771 2,	35 14
30 30 29 28 28 28 29 29 53 54 54 55 57 62 61 69 3 3 1 1 20 20 3 901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, 2,720 2,725 2,649 2,491 2,428 2,632 2,754 2,771 2,	19 15
53 54 54 55 57 62 61 69 3 3 1 1 20 20 3 901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, 2,720 2,725 2,649 2,491 2,428 2,632 2,754 2,771 2,	26 16
3 3 3 1 1 20 20 3 901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, 2,720 2,725 2,649 2,491 2,428 2,632 2,754 2,771 2,	28 17
901 966 1,010 1,017 1,031 1,000 933 887 3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, 2,720 2,725 2,649 2,491 2,428 2,632 2,754 2,771 2,	4 18
3,572 3,640 3,677 3,832 3,861 4,113 4,254 4,199 4, 2,720 2,725 2,649 2,491 2,428 2,632 2,754 2,771 2,	3 19
2, 720 2, 725 2, 649 2, 491 2, 428 2, 632 2, 754 2, 771 2,	68 20
3,121 3,121 3,221 3,221 7,221	9 21
523 490 459 367 375 523 526 509	36 22
)4 23
170 165 140 125 130 110 120 130	10 24
2,231 2,363 2,434 2,290 2,226 2,345 2,334 2,458 2,	28 25
4,648 4,622 4,658 4,483 4,565 4,439 4,311 4,333 3,	86 26
926 907 882 889 888 874 865 882	3 27
633 639 631 622 633 636 672 667	33 28
16 16 15 5 7 5 11 10	10 29
10,849 10,967 10,982 11,017 11,079 11,071 11,169 11,195 11,	81 39
12,548 12,394 12,634 12,458 12,617 13,257 13,653 13,685 13,	92 31
953 965 937 949 955 948 951 973	0 32
2,237 2,201 2,212 2,212 2,256 2,274 2,301 2,356 2,	9 33
39 32 25 23 23 32 37 38	39 34
6,986 6,944 7,047 6,977 6,892 6,958 6,954 6,909 6,	17 35
4,249 4,100 3,952 3,952 4,167 4,205 4,115 4,225 4,	14 36
47 43 42 43 43 38 44 43	10 37
5,461 5,894 6,090 6,000 6,050 6,218 6,395 6,590 6,	27 38
*358 494 483 466 390 350 483 357	29 39
2,310 2,292 2,303 2,243 2,221 2,240 2,252 2,256 2,	76 40
1,227 1,313 1,322 1,336 1,334 1,345 1,306 1,199 1,	72 41
2,607 2,192 931 370 538 745 1,078 1,496 1,	53 42
459 464 506 483 510 470 474 507	79 43
65 66 67 64 63 68 67 67	64 44
902 884 896 915 936 903 947 941	10 43
14,304	
3,311 3,311 3,243 3,298 3,885 3,368 3,429 3,467 3,	53 47
200,297 200,399 200,424 197,883 198,853 200,482 202,370 200,841 199,	61 48



PROPORTION OF BUSINESS DONE:

BY INDUSTRIES.

1888, 1889.





PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

[In this presentation, greatest capacity, or maximum production, has been considered as 100 per cent, and the "percentages" given indicate the proportions, for the number of establishments specified, on the basis stated.]

PERCENTAGES - 1888, 1889.

INDUSTRIES, AND		TAB- MENTS	INDUSTRIES, AND LISHN	TAB- HENTS
Proportion of Business Done.	1888	1889	Proportion of Business Done. 1888	1889
Agricultural Implements.	5	5	Boots and Shoes. 291	291
60 per cent,	-	1	10 per cent,	2
63 per cent,	1	-	13 per cent,	1
67 per cent,	1	-	15 per cent,	1
75 per cent,	1	2	20 per cent,	3
80 per cent,	1	_	25 per cent,	2
88 per cent,	_	1	30 per cent, 1	2
90 per cent,	1	1	32 per cent, 1	1
7 4 4			33 per cent, 3	-
Arms and Ammunition.	10	10	34 per cent, 1	-
17 per cent,	1	1	35 per cent, 1	3
20 per cent,	-	1	40 per cent, 2	5
25 per cent,	-	1	42 per cent,	1
30 per cent,	1	1	44 per cent,	1
35 per cent,	1	-	45 per cent,	1
50 per cent,	2	1	46 per cent,	1
60 per cent,	-	1	50 per cent,	27
67 per cent,	1	-	54 per cent,	1
75 per cent,		1	55 per cent,	2
80 per cent,	-	1	60 per cent, 1S	19
83 per cent,	1	-	61 per cent,	1
90 per cent,	1	1	22	
96 per cent,	1	-	62 per cent,	1
98 per cent,	1	1	64 per cent,	2
Artisans' Tools.	8	8	65 per cent,	9
50	1		66 per cent, 4	2
00	1		67 per cent,	19
25	1	_	68 per cent,	1
	_	1	69 per cent,	Î
71 per cent,	1	2	70 per cent,	18
	2	1	72 per cent,	1
• '	1	3		_
85 per cent,		1	To Post county	1
90 per cent,	1	1	74 per cent, 1	1

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. ${\tt PERCENTAGES-1888,\ 1889-Continued.}$

Industries, and		AB- IENTS	Industries, and		TAB- HENTS
Proportion of Business Done.	1888	1889	Proportion of Business Done.	1888	1889
Boots and Shoes - Con.			Carpetings — Con.		
75 per cent,	56	64	90 per cent,	1	3
78 per cent,	1	. 3	94 per cent,	1	_
80 per cent,	27	20	100 per cent,	1	1
83 per cent,	1	_	-		
85 per cent,	3	10	Carriages and Wagons.	19	19
86 per cent,	1	_	50 per cent,	2	4
87 per cent,	2	3	60 per cent,	5	_
88 per cent,	1	3	64 per cent,	1	_
90 per cent,	19	24	70 per cent,	-	1
- '	10	2	75 per cent,	5	7
F	-		83 per cent,	1	-
94 per cent,	6	1	95 per cent,	-	1
95 per cent,	2	3 2	100 per cent,	5	6
96 per cent,		- 1	Chemical Preparations		
97 per cent,	1	2	(Compounded).	2	2
98 per cent,	-	1	50 per cent,	1	2
100 per cent,	28	25	98 per cent,	1	-
Boxes (Paper and Wooden).	23	23			
13 per cent,	. 1	-	Clocks and Watches.	2	2
25 per cent,	1	1	67 per cent,	1	1
30 per cent,	_ '	1	80 per cent,	1	1
33 per cent,	1		GI III		
50 per cent,	1	1	Clothing.	47	47
55 per cent,	_	1	49 per cent,	1	-
65 per cent,	1		50 per cent,	4	4
66 per cent,	1	_	58 per cent,	-	1
	2	-	60 per cent,	2	6
-	2	-	61 per cent,	1	-
70 per cent,	3	1	63 per cent,	1	-
75 per cent,		7	65 per cent,	1	-
80 per cent,	3	2	66 per cent,	1	-
85 per cent,	1	1	67 per cent,	3	1
90 per cent,	2	4	70 per cent,	2	1
95 per cent,	1	1	71 per cent,	-	2
100 per cent,	3	3	75 per cent,	8	11
Burial Cases, Caskets,			78 per cent,	3	_
Coffins, etc .	1	1	80 per cent,	2	6
75 per cent,	1	1	82 per cent,	_	1
Buttons and Dress Trim-			83 per cent,	_	2
mings.	4	4	85 per cent,	3	2
33 per cent,		1	88 per cent,	_	1
40 per cent,	1	1	90 per cent,	3	3
60 per cent,	1	1	92 per cent,	1	_
75 per cent,	1	-	100 per cent,	11	6
80 per cent,	1	1		-1	U
	5	5	Cooking, Lighting, and Heat-	2	2
Carpetings.		- 1	ing Apparatus.	_	2
75 per cent,	-	1	60 per cent,		2
80 per cent,	1	-	75 per cent,	1	-
89 per cent,	1	-	80 per cent,	1	-

PROPORTION OF BUSINESS DONE: BY INDUSTRIES — Continued. PERCENTAGES — 1888, 1889 — Continued.

Indust				LISH	TAB- MENTS	Industries, And			TAB- MENTS
Proportion of	Bus	SINES	s Done	1888	1889	Proportion of Busini	ess Done.	1888	1889
Cordage	and	Twin	e.	12	12	Emery and Sand Pe	aper and		
25 per cent,				1	-	Cloth, etc.		2	2
45 per cent,				1	1	60 per cent,		1	-
50 per cent,				_	1	75 per cent,		1	-
54 per cent,				_	_	80 per cent,		-	1
56 per cent,				1	_	100 per cent,		-	1
65 per cent.				_	1				
70 per cent,				1	_	Fertilizers.		1	1
75 per cent,					2	20 per cent,		-	1
78 per cent,				_	1	50 per cent,		1	-
80 per cent,	Ĭ.	·			2	,			
86 per cent,	Ċ	-		ļ	1	Flax, Hemp, and Jut	e Goods.	3	3
90 per cent,	•	•			1				
100 per cent,	•	٠		4	2	65 per cent,		1	-
roo per cent,	•	•		*	-	70 per cent,		1	1
Cotton	Goo	ods.		136	136	100 per cent,		1	2
25 per cent,				_	1				
48 per cent,				-	1	Food Preparati	ons.	74	74
50 per cent,				1	2	20 per cent,		1	1
55 per cent,				_	1	25 per cent,		2	:
60 per cent,		:		1	1	33 per cent,		-	
70 per cent,				3	2	50 per cent,		13	1.
72 per cent,				_	1	53 per cent,		1	
75 per cent,	•			4	3	60 per cent,		1	:
78 per cent,	•	•		i	1	65 per cent,		3	_
80 per cent,	•	•		6	5	66 per cent,		1	:
81 per cent,		•	: :	1	1	67 per cent,		3	4
85 per cent,	•	٠			4	70 per cent,		2	2
87 per cent,	•	•			2	71 per cent,		_	1
88 per cent,	•	•	•		1	75 per cent,		19	2
-			•		7	77 per cent,		_	J
90 per cent,	•		•			80 per cent,		1	
91 per cent,	•	•	•	!	1	85 per cent,		3	
92 per cent,		•	•	1 -	2	90 per cent,		7	(
93 per cent,		•	-		1	_		1	
94 per cent,	٠			_	3	92 per cent,		1	1
95 per cent,		٠	•	1	8	95 per cent,		12	
96 per cent,	٠			1	4	100 per cent,		1.2	,
97 per cent,					4	F		47	47
98 per cent,					2	Furniture.		+1	
99 per cent,				1	2	5 per cent,		-]
100 per cent,		•		. 85	73	50 per cent,		4	2
Cotton III			041			59 per cent,		-]
Cotton, Wood Tes	len, ctiles		otner	2	2	60 per cent,		2	:
75 per cent,	•			_	1	63 per cent,		1	-
90 per cent,				1 -	-	65 per cent,		1	;
100 per cent,	Ċ			1 .	1	66 per cent,		1	
1.02 00210,	·				_ ^	67 per cent,		5	:
Dye	stuff	8.		1	1	70 per cent,		3	:
50 per cent,	. "			1	1	75 per cent,		12	1.

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. PERCENTAGES—1888, 1889—Continued.

Indust						AB- IENTS	Industries, and Lishm	
Proportion of	Bu	SINES	s Don	Œ.	1888	1889	Proportion of Business Done. 1888	1889
Furnitu	re –	- Con					Leather — Con.	
80 per cent,					5	3	66 per cent, 1	1
83 per cent,					2	1	67 per cent, 6	2
84 per cent,					1	-	68 per cent, 1	1
85 per cent,					2	3	70 per cent, 1	4
87 per cent,					1	_	72 per cent,	2
90 per cent,					5	6	74 per cent, 1	_
95 per cent,					_	1	75 per cent, 15	19
100 per cent,					2	2	77 per cent,	1
,							80 per cent,	4
G	lass				5	5	82 per cent,	1
50 per cent,					1	1	83 per cent,	1
75 per cent,					-	1	85 per cent,	2
80 per cent,					-	1	86 per cent,	_
90 per cent,					1	1	87 per cent,	_
95 per cent,					_	1	00	_
100 per cent,					3	_		9
							- I	1
Hose: Rubb	er.	Linen	etc.		1	1		16
60 per cent,					1	_	100 per cent,	10
75 per cent,	·				_	1		
to per cent,	•	·	•		İ	-	Linen. 3	3
Hosiery an	a K	nit G	nnde		11	11	55 per cent, 1	_
	(t A)	nee Cr				11	60 per cent,	1
25 per cent,	•	•	•	•	1	_	87 per cent,	1
40 per cent,	•	•	•	•	1	_	95 per cent,	1
50 per cent,	•		•	•	-	2	97 per cent, 1	-
65 per cent,	•	•	•	•	_	2	100 per cent, 1	-
66 per cent,	•	•	•	•	1	_		
70 per cent,	•	•	•	•	-	1	Liquors: Malt, Distilled, and	
71 per cent,	•	•	•	٠	2	-	Fermented. 23	23
73 per cent,		•	٠	•	-	1	25 per cent,	3
75 per cent,		•	•	٠	4	3	30 per cent, 1	-
80 per cent,			٠		1	1	33 per cent, 2	1
100 per cent,					1	1	50 per cent, 5	5
							55 per cent,	2
Le	uthe	r.			96	96	60 per cent, 2	2
5 per cent,					1	-	63 per cent, 2	1
10 per cent,					-	1	65 per cent, 1	-
20 per cent,					-	1	67 per cent, 2	1
25 per cent,					-	0	68 per cent, 1	-
30 per cent,					-	2	70 per cent,	1
33 per cent,					1	_	75 per cent,	2
40 per cent,					2	3	80 per cent, 2	3
45 per cent,					2	_	97 per cent,	1
50 per cent,			·		15	11	100 per cent,	1
56 per cent,			•		1	1 -		
57 per cent,					1	_	Lumber. 1	1
-	•	•	•		3	7	75 per cent,	. 1
60 per cent,	•	•	•	•	3	4	90 per cent,	
65 per cent,	•	•	•	•	0	*	so per cent,	

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued.

PERCENTAGES—1888, 1889—Continued.

Industr						AB- IENTS	INDUSTRIES, AND		AB- IENTS
Proportion of	Bus	INES	ss Do	NE.	1888	1889	Proportion of Business Done.	1888	1889
Machines an	d Me	ach	inery		84	84	Metals and Metallic Goods		
15 per cent,					1	-	-Con.		
18 per cent,					1	-	83 per cent,	2.	_
25 per cent,					. –	1	85 per cent,	9	5
30 per cent,					1	1	88 per cent,	2	1
33 per cent,	. "				4	3	90 per cent,	15	12
35 per cent,					1	1	91 per cent,	1	_
40 per cent,					-	1	93 per cent,	-	1
43 per cent,					1	-	95 per cent,	2	4
44 per cent,					-	1	98 per cent,	-	1
45 per cent,					1	1	100 per cent,	14	8
50 per cent,					8	6	Mixed Textiles.	11	11
52 per cent,					-	1	33 per cent,	-	1
60 per cent,					7	4	50 per cent,	1	1
65 per cent,					1	2	56 per cent,	_	1
66 per cent,					2	1	60 per cent,	1	_
67 per cent,					4	_	67 per cent,	2	
70 per cent,					3	4	75 per cent,	1	1
72 per cent,					_	1	80 per cent,		1
75 per cent,					14	20	92 per cent,	1	1
76 per cent,					1	1	100 per cent,	5	5
80 per cent,		Ċ			4	6	_	-	
84 per cent,		•	·		1	_	Musical Instruments and Malerials.	23	23
85 per cent,	•	•	i		2	3	42 per cent,	_	1
90 per cent,	•	•	•	:	9	4	50 per cent,	4	3
	•	•				1	52 per cent,	1	_
91 per cent, 92 per cent,	•	•	•	•	1	1	60 per cent,	_	1
	•	•	•		3	3	70 per cent,	1	1
95 per cent,	•	•	•	•	1	2	75 per cent,	4	5
97 per cent,		•		•	13	15	77 per cent,	1	,
100 per cent,	•	•		•	1.5	10	-0	1	_
Metals and 1	Teta	llic	Good	ls.	122	122		2	1
20 per cent,					1			_	1
25 per cent,					2	3	84 per cent,	5	1
30 per cent,					-	1	90 per cent,	-	6
33 per cent,					7	2	100 per cent,	5	4
40 per cent,					2	1	Oils and Illuminating Fluids.	1	1
50 per cent,		Ċ			10	17	67 per cent,	1	-
55 per cent,			·		1	-	75 per cent,	-	1
60 per cent,	•	Ċ	·		4	7	Paper and Paper Goods.	68	68
65 per cent,	•	•	·		4	5	17 per cent,	_	1
66 per cent,	•	•	•		3	_	25 per cent,	1	_
67 per cent,			•		11	6	35 per cent,	_	1
69 per cent,					11	1	50	1	1
-				•	2	4		1	1
70 per cent,		•	•	•	_		60 per cent,	_	
72 per cent,		•	•	•	20	1 26	65 per cent,	-	1
75 per cent,				•	20		68 per cent,	- 1	1
76 per cent,		•		•	-	1	70 per cent,	1	7
80 per cent,			•	•	10	15	75 per cent,	4	1

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. PERCENTAGES—1888, 1889—Continued.

Industries, and Proportion of Business Done				TAB- MENTS	INDUST				ESTAB- LISHMENTS		
Proportion o	F Bus	SINES	S DONE.	1888	1889	PROPORTION OF	Busi	NESS	Done.	1888	188
Paper and P	aper	Good	s-Con.			Rubber and	Elast	ic Go	ods		
78 per cent,				1	1	60 per cent,	COH.			_	1
79 per cent,				2	_	75 per cent,	•	•		3	3
80 per cent,				4	4		•			2	2
82 per cent,				-	1	80 per cent;	•				
83 per cent,				-	1	S5 per cent,	•			2	1
85 per cent,				-	1	89 per cent,	•	•		1	
88 per cent,				1	1	90 per cent,	•	•		2	4
89 per cent,				_	1	93 per cent,	•	•		-]
90 per cent,	Ċ			5	3	100 per cent,	•	•		4	5
91 per cent,	•	•		2	_	Shipb	uildin	g.		6	6
92 per cent,	•	•		2	2	10 per cent,				1	-
_	•	•		[1	25 per cent,				1	_
94 per cent,	•	•		- 1	5	33 per cent,				1	_
95 per cent,	•	•		4		50 per cent,				1	3
96 per cent,	•	•		-	5	67 per cent,				_	1
97 per cent,	٠	•		1	1	75 per cent,				1	1
98 per cent,	•			3	1	100 per cent,				1	1
99 per cent,				1	1					1	
100 per cent,	•	•		35	27	Silk and	Silk	Good	8.	7	7
Print Works,	Due	Work	s, and			75 per cent,	•			1	2
	acher			16	16	90 per cent,				4	-
48 per cent,				-	1	92 per cent,				-	1
50 per cent,				1	-	95 per cent,				1	2
53 per cent,				-	1	100 per cent,				1	2
58 per cent,				1	- 1	St	one.			19	19
65 per cent,				1	-	25 per cent,				1	1
66 per cent,				-	1	33 per cent,	•	•		1	2
67 per cent,				_ [1		•	•		1	_
70 per cent,				1	_	35 per cent,	•	•	•		
75 per cent,				1	1	40 per cent,	•	•	•	-	1
78 per cent,	•			_	2	50 per cent,	•	•	•	1	2
80 per cent,	•	•		1	_ []	60 per cent,	•	•	•	2	_
81 per cent,	•	•		1	_	65 per cent,	•	•	•	-	1
	•	•		1	1	67 per cent,	•		•	2	1
82 per cent,	•	•		-	1	70 per cent,			•	1	1
84 per cent,	•	•		1	2	72 per cent,			•	-	1
85 per cent,	•	•		1		75 per cent,				6	7
90 per cent,	•	•		3	1	80 per cent,				1	-
94 per cent,	•	•		-	1	90 per cent,				1	1
95 per cent,	•	•			1	100 per cent,				2	1
00 per cent,	•	٠		4	3	Straw and Pa	lm T.e	af G	nods.	16	16
Railroad Co	nstru	ction	and			25 per cent,	0110 250	uj un		1	_
Equi	ipmer			1	1	40 per cent,				_	2
70 per cent,				1	-	_			•	1	3
75 per cent,				-	1	50 per cent,			•		о 1
Dubben ar 7	F'1~-	tion.	ods	90	100	60 per cent,					2
Rubber and	Luas.	uc G		20	20	65 per cent,			.	1	
33 per cent,	•	•		1	1	67 per cent,			•	1	-
50 per cent,		•		5	3	70 per cent,			•	1	1
55 per cent,	٠			-	1	75 per cent,				2	1

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. PERCENTAGES — 1888, 1889 — Continued.

Industries, and	LISH	rab- Ments	Industries, and	ESTAB- LISHMENTS		
Proportion of Business Done	1888	1889	Proportion of Business Done.	1888	1889	
Straw and Palm Leaf Goods			Woollen Goods - Con.			
— Con.		1	55 per cent,	-	1	
78 per cent,	_	1	56 per cent,	1	_	
80 per cent,		_	57 per cent,	_	1	
83 per cent,	1	-	60 per cent,	1	1	
84 per cent,	1	1	0=	1		
85 per cent,	. 2	1	0°	. 1	-	
88 per cent,	1	-	* '	1	$\frac{1}{2}$	
90 per cent,	1	1	70 per cent,			
100 per cent,	2	2	72 per cent,	1	1	
Tallow, Candles, Soup, and			73 per cent,	-	1	
Grease.	13	13	75 per cent,	3	-	
25 per cent,	1	-	80 per cent,	4	5	
50 per cent,	-	1	81 per cent,	1	-	
60 per cent,	1	1	82 per cent,	-	1	
75 per cent,		5	83 per cent,	1	1	
80 per eent,	2	1	84 per cent,	1	-	
0= m - m - m +	2	_	85 per cent,	3	4	
80	1	_	87 per cent,	1	-	
-		2	88 per cent,	-	1	
90 per cent,	3	1	90 per cent,	2	8	
95 per cent,	-	1	91 per cent,	-	1	
99 per cent,	-	1	92 per cent,	2	2	
00 per cent,	1	1	95 per cent,	1	_	
Whips, Lashes, and Stocks.	1	1	96 per cent,	1	_	
70 per cent,	-	1	0=	1	_	
80 per cent,	1	_	1 00	3	2	
Wooden Goods.	17	17	00	1	-	
05	1	1		51	50	
00			100 per cent,	31	30	
	1	1	Want 1 Gas 1	10	10	
40 per cent,		1	Worsted Goods.	16	16	
50 per cent,	3	1	30 per cent,	-	1	
55 per cent,	1	-	40 per cent,	1	~	
60 per cent,	-	1	50 per cent,	1	-	
65 per cent,	- 1	1	55 per cent,	-	1	
67 per cent,	3	1	60 per cent,	1	1	
70 per cent,	-	1	67 per cent,	-	1	
75 per cent,	3	2	70 per cent,	1	1	
80 per cent,	1	1	80 per cent,	2	-	
90 per cent,	1	3	85 per cent,	2	1	
00 per cent,	3	3	90 per cent,	1	1	
Woollen Goods.	86	86	95 per cent,	1	1	
		-10	100 per cent,	6	8	
40 per cent,	1					
50 per cent,	3	3				

PROPORTION OF BUSINESS DONE: BY INDUSTRIES — Continued. • PERCENTAGES — 1888, 1889 — Concluded.

RECAPITULATION. PERCENTAGES - 1888, 1889.

	-			ON OF BUSINE		
Industries.	_	18	888	1889		
INDUSTRIES.	1	Estab- ishments	Percent- ages	Estab- lishments	Percent ages	
Agricultural implements,		5	75.00	5	77.61	
Arms and ammunition,	.	10	62.10	10	54.50	
Artisans' tools,	.	8	74.13	8	80.75	
Boots and shoes,		291	70.93	291	71.53	
Boxes (paper and wooden),	.	23	71.78	23	76.30	
Burial cases, caskets, coffins, etc.,	.	1	75.00	1	75.00	
Buttons and dress trimmings,		4	63.75	4	53.25	
Carpetings,	.	5	90.60	5	89.00	
Carriages and wagous,	.	19	74.84	19	78.42	
Chemical preparations (compounded),	.	2	74.00	2	50.00	
Clocks and watches,		2	73.50	2	73.50	
Clothing,		47	78.21	47	76.13	
Cooking, lighting, and heating apparatus,		2	77.50	2	60.00	
Cordage and twine,		12	75.42	12	77.00	
Cotton goods,		136	95.45	136	93.18	
Cotton, woollen, and other textiles,		2	95.00	2	87.50	
Dyestuffs,		1	50.00	1	50.00	
•		2	67.50	2	90.00	
Emery and saud paper and cloth, etc., Fertilizers,		1	50.00	1	20.00	
		3	78.33	. 3	90.00	
Flax, hemp, and jute goods,		- 1		1		
Food preparations,		74	73.68	74	68.34	
Furniture,		47	74.81	47	73.88	
Glass,	.	5	88.00	5	78.00	
Hose: rubber, linen, etc.,	•	1	60.00	1	75.00	
Hosiery and knit goods,	•	11	68.45	11	70.73	
Leather,	٠,	96	73.77	96	71.55	
Linen,		3	84.00	3	80.67	
Liquors: malt, distilled, and fermented, .	•	23	62.78	23	59.78	
Lumber,	•	1	90.00	1	75.00	
Machines and machinery,		84	72.58	84	74.89	
Metals and metallic goods,		122	73.35	122	72.29	
Mixed textiles,		11	82.82	11	80.55	
Musical instruments and materials,		23	78.65	23	78.65	
Oils and illuminating fluids,	.	1	67.00	1	75.00	
Paper and paper goods,		68	92.28	68	89.59	
Print works, dye works, and bleacheries, .	.	16	82.38	16	81.00	
Railroad coustruction and equipment, .	-	1	70.00	1	75.00	
Rubber and elastic goods,		20	75.35	20	76.05	
Shipbuilding,		6	48.83	6	65.33	
Silk and silk goods,		7	90.00	7	90.29	
Stone,		19	67.74	19	64.21	
Straw and palm leaf goods,		16	76.13	16	68.88	
Tallow, candles, soap, and grease,		13	78.69	13	79.92	
Whips, lashes, and stocks,		1	80:00	1	70.00	
Wooden goods,		17	68.18	17	71.18	
Woollen goods,		86	91.40	86	91.37	
Worsted goods,		16	83.44	16	84.50	
· ·	-		EE 50	ļ	F0 F1	
ALL INDUSTRIES,		1,364	77.52	1,364	76.74	

PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

WEEKS IN OPERATION-1888, 1889.

Industries, and Number of Weeks in		TAB- MENTS	Industries, And Number of Weeks in	ESTAB- LISHMENTS	
OPERATION.	1888	1889	OPERATION.	1888	1889
Agricultural Implements.	5	5	Boots and Shoes - Con.		
38 weeks,	-	1	46 weeks,	11	17
12 weeks,	1	_	47 weeks,	6	20
14 weeks	_	1	48 weeks,	20	29
45 weeks,	1	_	49 weeks,	18	20
19 weeks,	_	1	50 weeks,	57	64
51 weeks,	3	2	51 weeks,	78	69
•		_	52 weeks,	_	1
Arms and Ammunition.	10	10	on weens, t		
10 weeks,	1	1	Boxes (Paper and Wooden).	23	23
17 weeks,	1	-	40 weeks,	1	
8 weeks,	-	1	43 weeks,	_	
9 weeks,	-	1	44 weeks,	1	
0 weeks,	3	4	46 weeks	_	
1 weeks,	5	3	47 weeks,	_	
Artisans' Tools.	8	8	48 weeks,	2	
2 weeks,	1	_	49 weeks,	1	
5 weeks,	1		50 weeks,	5	
6 weeks,	1	1	51 weeks,	13	
0 weeks,	1	1	,	10	
	4	6	Burial Cases, Caskets, Coffins, etc.	1	
·	4	0		1	
Boots and Shoes.	291	291	51 weeks,	1	
7 weeks,	-	1	Buttons and Dress Trim-	4	
4 weeks,	-	1	mings.	_	
6 weeks,	3	2	45 weeks,	1	
7 weeks,	-	1	46 weeks,	-	
0 weeks,	2	1	50 weeks,	2	
3 weeks,	-	4	51 weeks,	1	:
4 weeks,	4	-	Carpetings.	5	
5 weeks,	3	_		1	'
6 weeks,	2	1		1	
8 weeks,	_	4	1	-	
9 weeks,	4	5	49 weeks,	1	
0 weeks	34	3	50 weeks,	-	
1 weeks,	3	6	51 weeks,	2	;
2 weeks,	7	13	Carriages and Wagons.	19	1
3 weeks,	9	6	33 weeks,	1	
4 weeks,	7	8	34 weeks,	1	
15 weeks,	23	15		1	
owcens,	20	10	44 weeks,	1	

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. PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. WEEKS IN OPERATION—1888, 1889—Continued.

Industries, And Number of Weeks in			TAB- MENTS	Industries, AND NUMBER OF WEEKS IN	ESTAB- LISHMENTS	
OPERATION.	ZERS IN	1888	1889	OPERATION.	1888	1889
Carriages and Wagor	ıs—Con.	1.		Cotton Goods.	136	136
15 weeks,		1	1	29 weeks,	-	1
16 weeks,		1	_	30 weeks,	1	_
17 weeks,		1	3	35 weeks,	_	1
18 weeks,		_	1	38 weeks,	_	1
19 weeks,		2	1	39 weeks,		1
50 weeks,		3	3	40 weeks,	_	1
51 weeks,		8	10	41 weeks,	1	_
			1	43 weeks,	_	1
Chemical Prepare		2	2	44 weeks,	_	1
(Compounded)		_	1	45 weeks,		1
60 weeks,				·		1
ol weeks,		2	1	46 weeks,	$\frac{1}{2}$	2
Clocks and Wate	hes.	2	2	47 weeks,	-	
17 weeks,		_	1	48 weeks,	4 2	12
8 weeks,		1	1	49 weeks,	-	8
0 weeks,		1	_	50 weeks,	16	20
o weeks,		1		51 weeks,	108	81
Clothing.		47	47	52 weeks,	1	4
17 weeks,		_	1	Cotton, Woollen, and Other		
6 weeks,		1	_	Textiles.	2	2
0 weeks,		_	1	46 weeks,	-	1
2 weeks,		1	1	50 weeks,	1	_
3 weeks,		2	1	51 weeks,	1	1
4 weeks,		1	1		1	1
5 weeks,		1	1	Dyestuffs.	_	
6 weeks,		5	2	50 weeks,		1
•			3	51 weeks,	1 .	-
7 weeks,		-	1	Emery and Sand Paper and		
8 weeks,		6		Cloth, etc.	2	2
9 weeks,			3	50 weeks,	1	-
60 weeks,		4	7	51 weeks,	1	2
1 weeks,		26	25	Fertilizers.	1	1
Cooking, Lighting, a	A Heat.			40 weeks,	1	_
ing Apparatu		2	2		_	1
5 weeks,		_	1	51 weeks,	_	1
6 weeks,		_	1	Flax, Hemp, and Jute Goods.	3	3
7 weeks,		2	_	32 weeks,	1	-
,				49 weeks,	-	1
Cordage and Tu	ine.	12	12	50 weeks,	1	2
8 weeks,		-	1	51 weeks,	1	-
2 weeks,		-	1			
3 weeks,		1	-	Food Preparations.	74	74
4 weeks,		2	-	17 weeks,	-	1
6 weeks,		1	2	24 weeks,	-	1
7 weeks,		1	-	30 weeks,	1	1
8 weeks,		-	2	34 weeks,	1	-
9 weeks,		_	2	36 weeks,	1	-
0 weeks,		2	2	37 weeks,	-	1
		1	2			1

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. WEEKS IN OPERATION—1888, 1889—Continued.

INDUSTRIE AND NUMBER OF		KS IN		AB- MENTS	INDUSTRIES, ESTAB- LISHMENTS
OPERATIO		21.5 2.1	1888	1889	OPERATION. 1888 1889
Food Preparation	ns —	Con.			Hosiery and Knit Goods-Con.
10 weeks,			2	1	50 weeks, 1 3
11 weeks,			1	1	51 weeks, 4 2
42 weeks,			2	_ 1	52 weeks,
13 weeks,				1	
4 weeks,			-	1	Leather. 96 96
15 weeks,			2	-	7 weeks, 1
16 weeks,			1	1	13 weeks, 1 -
7 weéks,			1	1	17 weeks, 2
8 weeks,			2	4	20 weeks, 1
9 weeks,			1	1	21 weeks,
60 weeks,			10	8	22 weeks, 1 -
il weeks,			48	44	25 weeks,
2 weeks,			1	6	28 weeks, 1 -
Furniture			47	47	31 weeks, 1
9 weeks,	е.		- 41	1	33 weeks, 1
•	•		_		34 weeks, 1
9 weeks,	•		1	1	35 weeks, 1 1
	•		_	2	36 weeks, 1 2
3 weeks,			_		37 weeks, 1
4 weeks,	•		2	1	28 weeks, 2 -
5 weeks,	•			-	40 weeks, 3 1
16 weeks,			1	-	42 weeks, 1
7 weeks,	•		-	1	43 weeks, 1 1
8 weeks,			2	2	44 weeks,
19 weeks,	•		4	9	45 weeks, 4 1
io weeks,	•		18	10	.46 weeks,
1 weeks,			19	19	47 weeks, 2
2 weeks,	٠			1	48 weeks, 3 7
Glass.			5	5	49 weeks,
5 weeks,			1	-	50 weeks, 14 15
6 weeks,			-	1	51 weeks,
0 weeks,			-	1	52 weeks,
3 weeks,			2	1	
6 weeks,			1	- 1	Linen. 3 3
ol weeks,			1	2	47 weeks,
Hose: Rubber, L.	inen	etc	1	1	48 weeks, 1 -
00 weeks,			1	1	49 weeks, 1 1
					51 weeks, 1 1
Hosiery and Kni	t Goo	ods.	11	11	Liquors: Malt, Distilled, and
2 weeks,	•		1	-	Fermented. 23 23
6 weeks,			1	- 1	9 weeks, 1
8 weeks,			-	1	25 weeks, 1
0 weeks,	•	•	1	- 1	40 weeks, 1
2 weeks,	٠		-	1	45 weeks, 1
3 weeks,			1	1	46 weeks,
7 weeks,			1	-	59 weeks, 3
8 weeks,			1	-	51 weeks,
19 weeks,			-	1	52 weeks, 5

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. WEEKS IN OPERATION—1888, 1889—Continued.

INDUSTRIES, AND NUMBER OF WEEKS IN		TAB- MENTS	INDUSTRIES, AND NUMBER OF WEEKS IN	ESTAB- LISHMENTS		
OPERATION.	1888	1889	OPERATION.	1888	1889	
Lumber.	1	1	Musical Instruments and Materials — Con.			
49 weeks,	. 1	_ '	49 weeks,		1	
50 weeks,		1	70 1	3	4	
			51 weeks,	15	14	
Machines and Machinery.	84	84	· ·	. 13	2	
41 weeks,		1	52 weeks,			
44 weeks,	. 3	1	Oils and Illuminating Fluids.	1	1	
45 weeks,	. 2	-	50 weeks,	-	1	
46 weeks,	. 1		51 weeks,	1		
47 weeks,	. 1	2	Danier and Danier Cooks	68	68	
48 weeks,	. 5	3	Paper and Paper Goods.	00		
49 weeks,	. 4	4	23 weeks,	_	1	
50 weeks,	. 12	17	24 weeks,	1	_	
51 weeks,	. 56	48	30 weeks,	1	-	
52 weeks,	-	8	40 weeks,	1]	
			41 weeks,	1		
Metals and Metallic Goods.	122	122	43 weeks,	-]	
30 weeks,		2	44 weeks,	-	:	
32 weeks,		1	45 weeks,	_		
33 weeks,		1	46 weeks,	2		
35 weeks,	. 2	-	47 weeks,	3	2	
36 weeks,	· -	1	48 weeks,	4	:	
38 weeks,		1	49 weeks,	3	10	
39 weeks,	-	1	50 weeks,	10	13	
40 weeks,	. 4	-	51 weeks,	34	25	
41 weeks,	. 1	-	52 weeks,	8		
42 weeks,	. 1	1	Print Works, Dye Works, and	*		
43 weeks,	. 6	2	Bleacheries.	16	16	
44 weeks,	. 2	5	42 weeks,	• 1		
45 weeks,	. 8	8	46 weeks,	1	2	
46 weeks,	. 8	5	47 weeks,	1	-	
47 weeks,	. 4	8	48 weeks,	1]	
48 weeks,	. 10	9	49 weeks,	3	:	
49 weeks,	. 9	11	50 weeks,	1		
50 weeks,	. 19	24	51 weeks,	8		
51 weeks,	. 48	40				
52 weeks,		2	Railroad Construction and Equipment.	1		
			47 weeks,	1		
Mixed Textiles.	11	11	51 weeks,	_		
42 weeks,		1	or weeks,			
46 weeks,	. 1	-	Rubber and Elastic Goods.	20	20	
50 weeks,	. 3	2	43 weeks,	_]	
51 weeks,	. 7	8	45 weeks,	1	1	
Musical Instruments			46 weeks,	-	2	
Musical Instruments and Materials,	23	23	47 weeks,	5		
42 weeks,	. 1	_	49 weeks,	1		
45 weeks,	. 1	_	50 weeks,	5		
46 weeks,	. 1	1	51 weeks,	8	(
48 weeks,	. 2	1	52 weeks,	_		
	-	1	11			

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. WEEKS IN OPERATION - 1888, 1889 - Continued.

Industries, and Number of Weeks in		rab- Ments	INDUSTRIES, AND NUMBER OF WEEKS IN		TAB- IENTS
OPERATION.	1888	1889	OPERATION.	1888	1889
Shipbuitding.	6	6	Whips, Lashes, and Stocks.	1	1
26 weeks,	1	_	47 weeks,	-	1
43 weeks,	-	1	48 weeks,	1	_
48 weeks,	1	-			
50 weeks,		1	Wooden Goods.	17	17
51 weeks,	4	4	23 weeks,	1	-
Silk and Silk Goods.	7	7	33 weeks,	1	-
47 weeks,	1	_	34 weeks,	-	1
49 weeks,	1	2	41 weeks,	-	1
50 weeks,	3	2	44 weeks,	-	1
51 weeks,	2	3	45 weeks,	2	-
			48 weeks,	1	1
Stone.	19	19	49 weeks,	-	1
12 weeks,	-	1	50 weeks,	5	8
13 weeks,	-	2	51 weeks,	7	2
14 weeks,	1	,	52 weeks,	-	2
15 weeks,	1	-			
46 weeks,		1	Woollen Goods.	86	86
8 weeks,	1	1	25 weeks,	-	1
9 weeks,	1	-	26 weeks,	1	_
00 weeks,	3	5	34 weeks,	1	1
ol weeks, :	12	9	38 weeks,	1	_
Straw and Palm Leaf Goods.	16	16	39 weeks,	_	1
22 weeks,	_	1	40 weeks,	3	1
24 weeks,	_	1	41 weeks,	1	1
25 weeks,	1	_	42 weeks,	_	2
26 weeks,	1	_	43 weeks,	_	3
30 weeks,	1		44 weeks,	4	1
32 weeks,	1	_	45 weeks,	_	1
34 weeks,	_	1	46 weeks,	1	5
35 weeks,	1	1	47 weeks,	4	4
36 weeks,	1	1	48 weeks,	2	2
37 weeks,	2	2	49 weeks,	5	9
38 weeks,	2	_	50 weeks,	19	15
39 weeks,	_	1,	51 weeks,	44	37
	2		52 weeks,	_	2
U weeks,	1	_	oz wecks,	_	-
· ·	_	1	Worsted Goods.	16	16
14 weeks,	i	1		-	1
45 weeks,	_	1	21 weeks,	1	_
49 weeks,	1	2	23 weeks,	1	_
50 weeks,	2		28 weeks,	1	_
51 weeks,	2	3	40 weeks,	1	1
Tallow, Candles, Soap, and	10	7.0	49 weeks,	2	2
Grease.	13	13	50 weeks,		_
50 weeks,	-	3	51 weeks,	10	11
51 weeks,	13	9	52 weeks,	-	1
52 weeks,	-	1			

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. WEEKS IN OPERATION—1888, 1889—Continued.

RECAPITULATION. WEEKS IN OPERATION - 1888, 1889.

	_	AVERAGI	NUMBER OF	WEEKS IN	JPERATIO	
Industries.		18	888	1889		
INDUSTRES.	1	Estab- ishments	Average Weeks	Estab- lishments	Averag Weeks	
Agricultural implements,		5	48.00	5	46.60	
Arms and ammunition,		10	49.20	10	49.00	
Artisans' tools,		8	47.13	8	50.25	
Boots and shoes,		291	46.64	291	47.17	
Boxes (paper and wooden),		23	49.65	- 23	49.22	
Burial cases, caskets, coffins, etc.,		1	51.00	1 1	51.00	
Buttons and dress trimmings,		4	49.00	4	49.50	
Carpetings,		5	49.20	5	50.40	
Carriages and wagons,		19	47.63	19	49.63	
Chemical preparations (compounded), .		2	51.00	2	50.50	
Clocks and watches,		2	49.00	2	48.00	
Clothing		47	48.66	47	48.60	
0,		2	47.00	2	40.50	
	•	12	48.25	12	47.38	
Cordage and twine,	•					
Cotton goods,	•	136	50.45	136	49.71	
Cotton, woollen, and other textiles,	•	2	50.50	2	48.50	
Dyestuffs,	•	1	51.00	1	50.00	
Emery and sand paper and cloth, etc., .	•	2	50.50	2	51.00	
Fertilizers,	•	1	40.00	1	. 51.00	
Flax, hemp, and jute goods,		3 -	44.33	3	49.6	
Food preparations,		74	49.09	74	48.70	
Furniture,	•	47	49.72	47	48.79	
Glass,		5	41.60	5	44.20	
Hose: rubber, linen, etc.,		1	50.00	1	50.00	
Hosiery and knit goods,		11	45.45	11	48.00	
Leather,		96	47.94	96	47.05	
Linen,		3	49.33	3	49.00	
Liquors: malt, distilled, and fermented, .		23	48.65	23	49.52	
Lumber,		1	49.00	1	50.00	
Machines and machinery,		84	50.08	84	50.39	
Metals and metallic goods,		122	48.31	122	48.09	
Mixed textiles,		11	50.27	11	50.00	
Musical instruments and materials,		23	49.74	23	50.48	
Oils and illuminating fluids,		1	51.00	1	50.00	
Paper and paper goods,		68	49.37	68	49.18	
Print works, dye works, and bleacheries, .		16	49.25	16	49.00	
Railroad construction and equipment,		1	47.00	1	51.00	
Rubber and elastic goods,	i	20	49.35	20	49.25	
Shipbuilding,		6	46.33	6	49.50	
Silk and silk goods,	.	7	49.71	7	50.14	
		19	49.89	19	49.00	
,	٠	16	37.94	16	40.94	
Straw and palm leaf goods,		13	51.00	13	50.85	
Tallow, candles, soap, and grease,	.		48.00	15	47.00	
Whips, lashes, and stocks,		1			48.25	
Wooden goods,	•	17	47.12	17		
Woollen goods,		86	48.88	86	48.57	
Worsted goods,	.	16	46.88	16	48.94	
ALL INDUSTRIES,		1,364	48.38	1,364	48.42	

PROPORTION OF BUSINESS DONE: BY INDUSTRIES - Continued. WEEKS IN OPERATION - 1888, 1889 - Concluded. COMBINED RECAPITULATION. PERCENTAGES, AND WEEKS IN OPERATION -1888, 1889.

/	Number		AVE	RAGES	
Industries.	of Estab- lishments	Perce	ntages	Weeks in	Operation
INDUSTRIES.	Con- sidered	1888	1889	1888	1889
Agricultural implements,	5	75.00	77.61	48.00	46.60
Arms and ammunition,	10	62.10	54.50	49.20	49.00
Artisans' tools,	8	74.13	80.75	47.13	50.25
Boots and shoes,	291	70.93	71.53	46.64	47.17
Boxes (paper and wooden),	23	71.78	76.30	49.65	49.22
Burial cases, caskets, coffins, etc.,	1	75.00	75.00	51.00	51.00
Buttons and dress trimmings,	4	63.75	53.25	49.00	49.50
Carpetings,	5	90.60	89.00	49.20	50.40
Carriages and wagons,	19	74.84	78.42	47.63	49.63
Chemical preparations (compounded), .	2	74.00	50.00	51.00	50.50
and the second s	2	73.50	73.50	49.00	48.00
(1) 41 5	47	78.21	76.13	48.66	48.60
	2	77.50	60.00	47.00	40.50
Cooking, lighting, and heating apparatus,	12		E	48.25	
Cordage and twine,	136	75.42	77.00	50.45	47.33
Cotton goods,	1	95.45	93.18 87.50	50.45	49.71
Cotton, woollen, and other textiles,	2	95.00			48.50
Dyestuffs,	1	50.00	50.00	51.00	50.00
Emery and sand paper and cloth, etc., .	2	67.50	90.00	50.50	51.00
Fertilizers,	1	50.00	20.00	40.00	51.00
Flax, hemp, and jute goods,	3	78.33	90.00	44.33	49.67
Food preparations,	74	73.68	68.34	49.09	48.70
Furniture,	47	74.81	73.85	49.72	48.79
Glass,	5	88.00	78.00	41.60	44.20
Hose: rubber, linen, etc.,	1	60.00	75.00	50.00	50.00
Hosiery and knit goods,	11	68.45	70.73	45.45	48.00
Leather,	96	73.77	71.55	47.94	47.05
Linen,	3	84.00	80.67	49.33	49.00
Liquors: malt, distilled, and fermented, .	23	62.78	59.78	48.65	49.52
Lumber,	1	90.00	75.00	49.00	50.00
Machines and machinery,	84	72.58	74.89	50.08	50.39
Metals and metallic goods,	122	73.35	72.29	48.31	48.09
Mixed textiles,	11	82.82	80.55	50.27	50.00
Musical instruments and materials,	23	78.65	78.65	49.74	50.4S
Oils and illuminating fluids,	1	67.00	75.00	51.00	50.00
Paper and paper goods,	68	92.28	89.59	49.37	49.18
Print works, dye works, and bleacheries,	16	82.38	81.00	49.25	49.06
Railroad construction and equipment,	1	70.00	75.00	47.00	51.00
Rubber and elastic goods,	20	75.35	76.05	49.35	49.25
Shipbuilding,	6	48.83	65.33	46.33	49.50
Silk and silk goods,	7	90.00	90.29	49.71	50.14
Stone,	19	67.74	64.21	49.89	49.00
Straw and palm leaf goods,	16	76.13	68.88	37.94	40.94
Tallow, candles, soap, and grease,	13	78.69	79.92	51.00	50.85
Whips, lashes, and stocks,	1	80.00	70.00	48.00	47.00
Wooden goods,	17	68.18	71.18	47.12	4S.35
Woollen goods,	86	91.40	91.37	48.88	48.57
Worsted goods,	16	83.44	84.50	46.58	48.94
ALL INDUSTRIES,	1,364	77.52	76.74	48.38	48.42

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND WEEKS IN OPERATION—1888, 1889.

Percentages, and		TAB- MENTS	Percentages, and		TAB- MENTS
WEEKS IN OPERATION.	1888	1889	WEEKS IN OPERATION.	1888	1889
5 per cent.	1.	1	30 per cent.	4	9
	. 1	-	20 weeks,	-	1
		1	21 weeks,	_	1
	1	3	35 weeks,	_	1
10 per cent.		1	40 weeks,	1	1
7 weeks,		1	44 weeks,	1	1
	_	1	47 weeks,	-	2
48 weeks,	·		51 weeks,	2	2
51 weeks,	. 1	-			
13 per cent.	1	1	32 per cent.	1	1
38 weeks,	-	1	33 weeks,	-	1
51 weeks,	1	-	48 weeks,	1	-
15 per cent.	1	1	33 per cent.	22	15
36 weeks,		1	17 weeks,		1
51 weeks,	. 1	- [35 weeks,	1	_
77 man aant	1	2	36 weeks,	1	
17 per cent. 50 weeks,		2	39 weeks,	1	
,			40 weeks,	3	
$18 \ per \ cent.$	1	-	43 weeks,	1	
51 weeks,	. 1	-	44 weeks,	2	
20 per cent.	5	7	46 weeks,		1
24 weeks,		1	47 weeks,	1	1
26 weeks,	. 1	1	48 weeks,	1	1
30 weeks,	. 1	-	49 weeks,	1	_
37 weeks,		1	50 weeks,	2	4
11 weeks,	1	-	51 weeks,	s	6
16 weeks,	1	-	52 weeks,	_	1
17 weeks,	-	1			
50 weeks,	1	1	34 per cent.	1	-
51 weeks,	-	2	50 weeks,	1	-
25 per cent.	16	20	35 per cent.	4	. 5
17 weeks,	_	2	39 weeks,	-	1
23 weeks,	1	_	47 weeks,	1	-
24 weeks,	1	_	49 weeks,	1	1
26 weeks,		_	50 weeks,	-	2
30 weeks,	,	_	51 weeks,	2	1
32 weeks,	2	_	40 per cent.	10	15
33 weeks,	_	1	21 weeks,	1	_
9 weeks,	_	1	22 weeks,	1	1
0 weeks,	_	1	23 weeks,	1	-
Il weeks,		1	31 weeks,	_	1
4 weeks,		2	34 weeks,	-	1
15 weeks,	1	2	37 weeks,	-	1
16 weeks,		1	40 weeks,	2	_
17 weeks,	_	1	42 weeks,	-	1
S weeks,	-	2	43 weeks,	-	1
60 weeks,	1	1	44 weeks,	1 .	-
61 weeks,	6	5	47 weeks,		2

PROPORTION OF BUSINESS DONE: BY INDUSTRIES — Continued. COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND WEEKS IN OPERATION — 1888, 1889 — Continued.

Percentages, and	LISH	TAB- MENTS	PERCENTAGES, AND		TAB- MENTS
WEEKS IN OPERATION.	1888	1889	WEEKS IN OPERATION.	1888	1889
40 per cent — Con.			50 per cent - Con.		
48 weeks,	1	2	45 weeks,	11	3
19 weeks,	_	1	46 weeks,	4	6
50 weeks,	2	3	47 weeks,	3	3
51 weeks,	1	1	40 1	8	5
	1		48 weeks,	2	7
42 per cent.	-	2	50 weeks,	17	25
27 weeks,	-	1	51 weeks,	55	42
0 weeks,	-	1	52 weeks,	3	2
43 per cent.	1	-	oz weeks,	0	4
0 weeks,	1	-	52 per cent.	1	1
44 per cent.	_	2	46 weeks,	1	-
0 weeks,	_	1	51 weeks,	-	1
1 weeks,	_	1	53 per cent.	1	1
			46 weeks,		1
45 per cent.	6	3	51 weeks,	1	_
8 weeks,	-	1			
3 weeks,	1	_	54 per cent.	1	1
5 weeks,	1	-	49 weeks,	-	1
	1	2	50 weeks,	1	-
1 weeks,	3	-	55 per cent.	3	9
46 per cent.	-	1	25 weeks,	-	1
4 weeks,	-	1	44 weeks,	-	1
48 per cent.	_	2	45 weeks,	1	
5 weeks,	_	1	46 weeks,	1	-
2 weeks,	_	1	49 weeks,	1	-
2	_	1	50 weeks,	-	1
49 per cent.	1	-	51 weeks,	-	6
1 weeks,	1	-	56 per cent.	4	1
50 per cent.	135	121	44 weeks,	1	_
4 weeks,	100	1	50 weeks,	-	1
5 weeks,	1	1	51 weeks,	3	_
6 weeks,	3	1	57 per cent.	1	1
8 weeks,	2	_	45 weeks,	1	1
9 weeks,		1	50 weeks,	-	1
0 weeks,	_	2			_
2 weeks,	_	1	58 per cent.	1	1
3 weeks,	1	2	51 weeks,	1	1
4 weeks,	1	_ [59 per cent.	-	1
5 weeks,	2	_	49 weeks,	-	1
6 weeks,	2	4	60 per cent.	55	68
8 weeks,	2	1	24 weeks,	_	1
9 weeks,	1	_	25 weeks,	- 1	1
0 weeks,	8	-	30 weeks,	2	1
I weeks,	1	_	33 weeks,	-	2
2 weeks,	3	4	34 weeks,	1	_
3 weeks,	1	5	35 weeks,	_	1
4 weeks,	4	5	36 weeks,		1

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued.

COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND

WEEKS IN OPERATION—1888, 1889—Continued.

Percentages, and		TAB- TENTS	Percentages, and		TAB- IENTS
WEEKS IN OPERATION.	1888	1889	WEEKS IN OPERATION.	1888	1889
60 per cent — Con.			6G per cent.	15	7
38 weeks,	_	2	41 weeks,	1	_
39 weeks,	_	1	45 weeks,	2	_
40 weeks,	11	1	46 weeks,	1	_
41 weeks,	_	1	48 weeks,	2	_
42 weeks,	_	1	49 weeks,	1	_
43 weeks,	3	1	50 weeks,	2	2
44 weeks,	_	2	51 weeks,	6	4
45 weeks,	2	3	52 weeks,	_	1
46 weeks,	1	7			-
47 weeks,	1	2	67 per cent.	73	42
48 weeks,	3	5	34 weeks,	1	1
49 weeks,	1	5	39 weeks,	-	.1
50 weeks,	10	9	40 weeks,	7	2
	19	17	42 weeks,	1	-
· ·	2	}	43 weeks,	3	1
52 weeks,	2	4	44 weeks,	2	1
61 per cent.	1	1	45 weeks,	3	1
42 weeks,	_	1	46 weeks,	1	3
51 weeks,	1	_	47 weeks,	1	5
or weeks,	1		48 weeks,	8	4
G2 per cent.	1	-	49 weeks,	4	5
51 weeks,	1	-	50 weeks,	16	8
			51 weeks,	26	10
63 per cent.	7	2	68 per cent.	3	3
48 weeks,	-	1	40 weeks,	_	1
49 weeks,	1		41 weeks,	4	1
50 weeks,	1	-	40 1	1	_
51 weeks,	5	1	1	2	1
21			51 weeks,		
64 per cent.	1	2	69 per cent.	1	1
47 weeks,	-	1	51 weeks,	1	-
50 weeks,	_	1	52 weeks,	-	1
51 weeks,	1	-	70 per cent.	48	49
65 per cent.	28	31	34 weeks,	1	_
25 weeks,	1	- 01	35 weeks,	2	1
32 weeks,	1		39 weeks,	_	1
	1		40 weeks,	1	1
	_	2	41 weeks,	1	2
	_	0	42 weeks,	1	. 2
41 weeks,	_	1 3	10	1 1	2
42 weeks,	1	-	'	2	
45 weeks,	2	1	44 weeks,	5	2
46 weeks,	2	4	45 weeks,	1	2
47 weeks,	2	-	46 weeks,		2
48 weeks,	1	3	47 weeks,	2	2 3
49 weeks,	1	2	48 weeks,	-	_
50 weeks,	5	6	49 weeks,	3	3
51 weeks,	12	8	50 weeks,	7	11
52 weeks,	-	1	51 weeks,	21	17

PROPORTION OF BUSINESS DONE: BY INDUSTRIES - Continued. COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND WEEKS IN OPERATION - 1888, 1889 - Continued.

PERCENTAGES, AND	ESTAB- LISHMENTS 1888 1889		Percentages, and		AB- IENTS
WEEKS IN OPERATION.	1888	1889	WEEKS IN OPERATION.	1888	188
71 per cent.	2	4	78 per cent.	5	10
7 weeks,	_	1	39 weeks,	_	1
6 weeks,	1		45 weeks,		2
S weeks,	_	1	46 weeks,		2
9 weeks,		1	47 weeks,		1
0 weeks,	_	1	40 . 1	2	_
1 weeks,	1	_	48 weeks,		1
I weeks,	1		# o 1	1	1
72 per cent.	2	8		2	2
0 weeks,	-	1		-	
6 weeks,	1	_	52 weeks,	-	1
7 weeks,	_	1	79 per cent.	2	_
2 weeks	_	1	40 weeks,	1	_
3 weeks,	_	1	41 weeks,	1	
7 weeks,	1	_	II weeks,	1	
9 weeks,	_	1	80 per cent.	104	93
		3	23 weeks,	-	1
	_		30 weeks,	1	-
73 per cent.	1	2	38 weeks,	2	
4 weeks,	1	1	40 weeks,	5	
2 weeks,	-	1.	41 weeks,	1	2
74 per cent.	2	1	42 weeks,	1	
7 weeks,	_	1	43 weeks,	4	2
	2	_	4.4	3	2
			45	7	2
75 per cent.	201	248		4	4
3 weėks,	1	-	46 weeks,	6	
4 weeks,	2	1	48 weeks,	8	7
5 weeks,	2	-		-	8
8 weeks,	-	4	49 weeks,	7	
9 weeks,	2	1	50 weeks,	15	21
0 weeks,	12	-	51 weeks,	38	. 27
2 weeks,	6	8	52 weeks,	2	8
3 weeks,	1	7	81 per cent.	2	1
4 weeks,	3	3	(01	1	
5 weeks,	11	8	## 1	1	
6 weeks,	7	8	51 weeks,	1	1
7 weeks,	5	12	82 per cent.	_	5
8 weeks,	12	17	43 weeks,	_	1
9 weeks,		11	48 weeks,	_	1
0 weeks,	38	61	51 weeks,	_	9
1 weeks,	88	102			
2 weeks,	1	5	83 per cent.	8	6
•			37 weeks,	1	
76 per cent.	1	2	40 weeks,	1	-
9 weeks,	_	1	42 weeks,	1	_
1 weeks,	1	1	44 weeks,	_	1
77 per cent.	1	2	46 weeks,	2	_
1 weeks,	_	1	48 weeks,	1	_
		1			

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND WEEKS IN OPERATION—1888, 1889—Continued.

Percentages, and		TAB- MENTS	PERCENTAGES, AND		TAB- MENTS
WEEKS IN OPERATION.	1888	1889	WEEKS IN OPERATION.	1888	188
83 per cent — Con.			90 per cent—Con.		
50 weeks,	. 1	1	40 weeks,	1	1
51 weeks,		2	41 weeks,	_	1
			42 weeks,	_	1
84 per cent.	4	2	43 weeks,	1	_
34 weeks,	-	1	44 weeks,	_	
44 weeks,	. 1	-	45 weeks,	3	4
48 weeks,	. 1	-	46 weeks,	4	
51 weeks,	. 2	1	47 weeks,	6	(
85 per cent.	43	44	40 -1	5	,
36 weeks,	. 1	_	48 weeks,	5	1:
40 weeks,	. 1	_		31	28
41 weeks,	. 1	_	The state of the s	50	4
43 weeks,	. 1	1	51 weeks,	90	-
14 weeks,	. 1	_	52 weeks,	-	
	-	2	91 per cent.	4	
· ·		3	48 weeks,	_	
46 weeks,	. 1	1	49 weeks,	1	
47 weeks,		5	1	_	
48 weeks,	. 2	1	50 weeks,	3	
49 weeks,	. 4	4	51 weeks,	9	
50 weeks,	. 8	6	92 per cent.	9	
ol weeks,	. 20	22	46 weeks,	1	
86 per cent.	2	1	47 weeks,	4	
6 weeks,	. 1	-	48 weeks,	_	
00 weeks,	. 1	-	49 weeks,	1	
il weeks,		1	50 weeks,	_	
				3	
87 per cent.	5	6	51 weeks,	, 3	
4 weeks,	. 1	-	93 per cent.	1	
6 weeks,	. 1	-	48 weeks,	_	
7 weeks,		2	49 weeks,	_	
9 weeks,		1	51 weeks,	1	
50 weeks,	. 1	1	JI Weeks,	1	
ol weeks,	. 2	2	94 per cent.	3	
88 per cent.	8	9	43 weeks,	_	
8 weeks,	. 1	_	47 weeks,	1	
12 weeks,	. 1	_	48 weeks,	_	
4 weeks,		1	49 weeks,	1	
5 weeks,		1	51 weeks,	1	
50 weeks,	1	5	or weeks,	_	
	. 5	2	95 per cent.	29	3
of weeks,	. ,		30 weeks,	1	
89 per cent.	2	1	41 weeks,	1	
8 weeks,	. 1	-	43 weeks,	1	
19 weeks,	. -	1	48 weeks,	2	
60 weeks,	. 1	_	49 weeks,	1	
90 per cent.	108	113	50 weeks,	9	
32 weeks,		110	51 weeks,	14	1
	-	1	52 weeks,	_	
37 weeks,	1	1	, oz weeks,		

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued.

COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND

WEEKS IN OPERATION—1888, 1889—Continued.

PERCENTAGES, AN				TAB- MENTS	Percentages, and		AB- IENTS
WEEKS IN OPERATI	ON.		1888	1889	WEEKS IN OPERATION.	1888	1889
96 per cent.			7	11	99 per cent - Con.		
48 weeks,			-	1	51 weeks,	4	3
49 weeks,			1	6	52 weeks,	-	1
50 weeks,			4	3	100 per cent.	325	279
51 weeks,			2	-	9 weeks,	1	_
52 weeks,	•		-	1	26 weeks,	1	_
97 per cent.			7	10	39 weeks,	-	1
44 weeks,			_	1	40 weeks,	2	-
48 weeks,		•	2	_	41 weeks,	1	-
19 weeks			-	2	43 weeks,	4	1
	Ċ		2	3	44 weeks,	1	-
	·		3	4	45 weeks,	1	3
,	•	- 1	-	-	46 weeks,	3	-
98 per cent.			14	8	47 weeks,	2	2
19 weeks,	•		2	1	48 weeks,	10	5
60 weeks,		.	5	3	49 weeks,	11	13
l weeks,	•		7	4	50 weeks,	36	44
99 per cent.			5	4	51 weeks,	245	195
0 weeks,			1	_	52 weeks,	7	15

PROPORTION OF BUSINESS DONE: BY INDUSTRIES - Continued.

COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND WEEKS IN OPERATION-1888, 1889-Continued.

PERCENTAGES - 1888, 1889. RECAPITULATION.

		ъ	TO DATE	NTAG	T.C						ESTABLIS	HMENTS
			ERCE	NTAG	ES.						1888	1889
5 per cent, .											1	1
10 per cent, .			•		•	•			٠	•	1	3
13 per cent, .											1	1
l5 per cent, .											1	1
7 per cent, .											-1	2
.8 per cent, .											1	_
0 per cent, .											5	7
5 per cent, .											16	20
30 per cent, .											4	9
32 per cent, .											1	1
33 per cent, .											22	15
4 per cent, .											1	_
5 per cent, .											4	5
o per cent, .											10	15
2 per cent, .											_	2
3 per cent, .											1	_
4 per cent, .											_	2
5 per cent, .										.	6	3
6 per cent, .											_	1
8 per cent, .	·											2
9 per cent, .	•	·	Ĭ.	Ċ	· ·		·		·		1	_
io per cent, .	•	•	·				·	Ţ.	·		135	121
2 per cent, .	•	•	•		•	·	·	·			1	1
3 per cent, .	:	•	•	·	•	•	·	•	•		- 1	1
64 per cent, .	•	•	•	Ċ	•		•	•	•		1	1
55 per cent, .	:	•	•	•	•	•	•	•	•		3	9
66 per cent, .	-	•	:			•	•		·		4	1
of per cent, .	•	•	•	•	•	٠	•	•	•	•	1	1
	•	•	•	٠	•	•	•	•	:		1	1
8 per cent, .	•	•	•	•	•	•	•	•	•	•	_	1
9 per cent, .	•	•	•	٠	•	•	•	•	•	•	55	68
50 per cent, .	•	•	•	•	•	•	•	•	•	•	1	1
51 per cent, .	•	•	•	•	•	•	•	•	•	•	1	_
32 per cent, .	•	•	•	•	٠	•	•	•	•	•	7	2
3 per cent, .	•	•	•	•	•	•	•	•	•			2
4 per cent, .	•	•	•	•	•	•	•	•	•		1	31
5 per cent, .	•	•	•	•	•	•	•		•	.	28	7
66 per cent, .	•	•	•	•	•	•	•	•	•	•	15	42
7 per cent, .	٠	•	•	•	•	•	•	•	•	•	73	3
8 per cent, .	•	•	٠	•	•	•	•	•	٠	•	3	3 1
9 per cent, .	•	•	•	•	•	•	•	•	•	٠,	1	
0 per cent, .	•	•	•	•	•	•	•	•	•		48	49
1 per cent, .	•	٠	٠	•	•	•	•	•	•		2	4
2 per cent, .	٠	•	•	٠	•	•	•	٠	•	•	2	8
3 per cent, .	•	•	•	:	•	•	•	•	•	•	1	2
4 per cent, .			•		•	•	•	•	•		2	1
5 per cent, .	•	•		•	•	•	•	•	•		201	248
6 per cent, .						•	•	•	•	.	1	2

PROPORTION OF BUSINESS DONE: BY INDUSTRIES - Continued.

COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND WEEKS IN OPERATION—1888, 1889—Continued.

RECAPITULATION. PERCENTAGES - 1888, 1889 - Concluded.

	ro	ERCE	NTM 1 G	TI O				ESTABLI	SHMENTS
	r	ERCE	NTAG	ES.				1888	1889
77 per cent, .								1	2
78 per cent, .								5	10
79 per cent, .								2	-
80 per cent, .							.	104	93
81 per cent, .								2	1
82 per cent, .							.	-	5
83 per cent, .							.	8	6
84 per cent, .							.	4	2
85 per cent, .								43	44
86 per cent, .								2	1
87 per cent, .								5	6
88 per cent, .								8	9
89 per cent, .							.	2	1
90 per cent, .								108	113
91 per cent, .								4	5
92 per cent, .								9	9
33 per cent, .							.	1	6
94 per cent, .								3	6
95 per cent, .								29	35
96 per cent, .								7	11
97 per cent, .								7	10
98 per cent, .								14	8
99 per cent, .								5	4
00 per cent, .						٠	.	325	279
TOTAL,							.	1,364	1,364

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued.

COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND

WEEKS IN OPERATION—1888, 1889—Continued.

RECAPITULATION. PERCENTAGES AND WEEKS-1888, 1889.

								AVERAGE	E NUMBER O	F WEEKS IN C	OPERATIO
'	PEF	CENT	AGES					18	88	18	89
								Estab- lishments	Wecks	Estab- lishments	Weeks
5 per cent, .								1	13.00	1	19.00
10 per cent, .							•	1	51.00	3	24.00
13 per cent, .								1	51.00	- 1	38.00
15 per cent, .								1	51.00	1	36.00
17 per cent, .								1	50.00	2	50.00
18 per cent, .								1	51.00	-	_
20 per cent, .								5	38.60	7	40.86
25 per cent, .	,							16	39.88	20	42.95
30 per cent, .								4	46.50	9	39.56
32 per cent, .								1	48.00	1	33.00
33 per cent, .								22	46.05	15	47.73
34 per cent, .								1	50.00	_	
35 per cent, .				4				4	49.50	5	47.80
40 per cent, .								10	38.90	15	43.27
42 per cent, .				·		·		-	_	2	38.50
43 per cent, .	·		·	Ţ.	·	·	·	1	50.00		-
4 per cent, .	·		•	•	•	•	•	1 1	-	2	50.50
5 per cent, .	•	Ċ	•	•	•	•	:	6	48.50	3	46.00
l6 per cent, .	·	:	•	•	•	•		-	40.00	1	44.00
8 per cent, .	•	•	•	•	•	•	•	[_	2	38.50
19 per cent, .	•	•	•	٠	•	•	•	1	51.00		90.90
	•	•	•	•	•	•	•	1 1			46.05
50 per cent, .	•	•	•	٠	•	•	•	135	46.68	121	46.93
52 per cent, .	•	•	٠	•	•	•	•	1	46.00	1	51.00
3 per cent, .	•	•	•	٠	•	•	•	1	51.00	1	46.00
64 per cent, .	•	•	•	٠	٠	•	•	1	50.00	1	49.00
55 per cent, .	•	•	٠	٠	٠	٠	•	3	46.67	9	47.22
56 per cent, .	•	•	•	•	•	•	•	4	49.25	1	50.00
7 per cent, .	•	٩	٠	•	•	٠	٠	1	45.00	1	50.00
58 per cent, .	•	•	•	•	•	٠	•	1	51.00	1	51.00
59 per cent, .	•	•	•	•	•	•	٠	-	-	1	49.00
30 per cent, .	•	•	•		٠	•	•	55	46.64	68	46.26
51 per cent, .	•	•		•	•	•		1	51.00	1	42.00
32 per cent, .		•		•	•		•	1	51.00	-	-
53 per cent, .							•	7	50.57	2	49.50
64 per cent, .								1	51.00	2	48.50
55 per cent, .								28	47.36	31	47.61
66 per cent, .								15	48.53	7	50.86
57 per cent, .								73	48.04	42	47.74
8 per cent, .								3	50.33	3	44.00
69 per cent, .								1	51.00	1	52.00
70 per cent, .								48	47.73	49	47.96
1 per cent, .								2	43.50	4	38.50
2 per cent, .								2	41.50	8	44.25
3 per cent, .								1	44.00	2	48.00
74 per cent, .								2	50.00	1	47.00

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued.

COMPARISON FOR ALL INDUSTRIES. PERCENTAGES, AND WEEKS IN OPERATION -1888, 1889 — Concluded.

RECAPITULATION. PERCENTAGES AND WEEKS—1889, 1889—Concluded.

						AVERAGE	E NUMBER O	F WEEKS IN (OPERATIO
	PER	CENT	AGES			18	88	18	89
				•		Estab- lishments	Weeks	Estab- lishments	Weeks
75 per cent, .						201	48.33	248	49.00
76 per cent, .						1	51.00	2	50.00
77 per cent, .						1	50.00	2	45.50
78 per cent, .						5	49.60	10	47.10
79 per cent, .						2	40.50	-	-
80 per cent, .						104	48.01	93	48.67
81 per cent, .						2	50.00	1	51.00
82 per cent, .						_	-	5	48.80
83 per cent, .						S	44.75	6	49.00
84 per cent, .						4	48.50	2	42.50
85 per cent, .						43	48.84	44	49.45
86 per cent, .						2	48.00	1	51.00
87 per cent, .						5	48.40	6	49.17
88 per cent, .						8	48.13	9	49.00
89 per cent, .						2	49.00	1	49.00
90 per cent,						108	49.43	113	49.17
91 per cent, .						4	50.50	5	49.80
92 per cent, .						9	48.44	9	49.22
93 per cent, .						1	51.00	6	49.83
94 per cent, .						3	49.00	6	47.33
95 per cent, .						29	49.07	35	53.03
96 per cent, .						7	50.14	11	49.45
97 per cent, .						7	49.86	10	49.60
98 per cent, .						14	50.36	-8	50.38
99 per cent, .						5	50.80	4	51.25
00 per cent, .						325	50.24	279	50.58
TOTAL,						1,364	48.38	1,364	48.42

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued.

COMPARISON FOR ALL INDUSTRIES. WEEKS IN OPERATION,

AND PERCENTAGES—1888, 1889.

WEEKS IN OPERATION, AN	ID L		AB- IENTS	WEEKS IN OPERATION, AND		TAB- MENTS
Percentages.	18	88	1889	Percentages.	1888	1889
7 weeks.		_	1	29 weeks.	_	1
10 per cent,	.	_	1	50 per cent,		1
- ·		1				
9 weeks.		1	_	30 weeks.	6	4
100 per cent,	•	1	-	20 per cent,	1	-
$13\ weeks.$		1	-	25 per cent,	1	_
5 per cent,	•	1	- 1	50 per cent,	2	1
17 weeks.		-	5	60 per cent,		1
10 per cent,	.	-	1	72 per cent,	1	1
25 per cent,		_	2	80 per cent,	1	-
33 per cent,		_	1	95 per cent,	1	-
71 per cent,		-	1	31 weeks.	-	1
19 weeks.			1	40 per cent,	-	1
5 per cent,	.	_	1	32 weeks.	4	1
		-		25 per cent,	2	_
$20\ weeks.$		-	1	50 per cent,	_	1
30 per cent,	•	-	1	65 per cent,	1	-
21 weeks.		1	1	90 per cent,	1	_
30 per cent,		-	1	33 weeks.	2	
40 per cent,		1	-			6
				25 per cent,	-	1
22 weeks.	1	1	1	32 per cent,	_	1
40 per cent,	•	1	1.	50 per cent,	1	2
$23\ weeks.$		2	1	60 per cent,	-	2
25 per cent,	•	1	-	75 per cent,	1	-
40 per cent,	•	1	-	34 weeks.	7	4
80 per cent,		-	1	40 per cent,	_	1
24 weeks.		1	3	50 per cent,	1	
20 per cent,		_	1	60 per cent,	1	_
25 per cent,	1	1	_	65 per cent,	1	_
50 per cent,		_	1	67 per cent,	1	1
60 per cent,	1	_	1	70 per cent,	1	_
-	-			75 per cent,	2	1
25 weeks.		2	3	84 per cent,	_	1
50 per cent,		1	1	• ,		
55 per cent,		~	1	35 weeks.	7	4
60 per cent,		-	1	30 per cent,	-	1
65 per cent,	•	1		33 per cent,	1	-
26 weeks.		7	2	48 per cent,	-	1
20 per cent,		1	1	50 per cent,	2	-
25 per cent,	1	2		60 per cent,	-	1
50 per cent,	- 1	3	1	70 per cent,	2	1
		1	-	75 per cent,	2	-
•			,	36 weeks.	6	6
27 weeks.		-	1	15 per cent,	-	1
42 per cent,		•	1	33 per cent,	1	_
28 weeks.		2	_	50 per cent,	2	4
50 per cent,		- 1		60 per cent,		1

PROPORTION OF BUSINESS DONE: BY INDUSTRIES - Continued. COMPARISON FOR ALL INDUSTRIES. WEEKS IN OPERATION, AND PERCENTAGES — 1888, 1889 — Continued.

WEEKS IN C)PER	ATION	I, AN	D		AB- IENTS	WEEKS IN OPERATION, AND ESTAB	
PERC	ENTA	AGES.			1888	1889	Percentages. 1888 1	889
36 wee	ks –	- Con.					40 weeks — Con.	
71 per cent,					1	_	90 per cent,	1
72 per cent,					1	_	100 per cent,	_
85 per cent,					1	_		
	week	·			2	,	41 weeks. 9	10
20 per cent,		cs.			1 -	4	20 per cent, 1	-
	•	•	•	•			25 per cent,	1
40 per cent,	•	•	•	•	-	1	50 per cent, 1	-
72 per cent,	•	•	•		-	1	60 per cent,	1
83 per cent,	•	•	•	•	1	-	65 per cent,	1
90 per cent,	٠	•	٠	٠	1	1	66 per cent, 1	-
38	week	Ċ8.			5	10	68 per cent,	1
13 per cent,					_	1	70 per cent, 1	2
45 per cent,					_	1	77 per cent,	1
50 per cent,		·	Ċ	į.	2	1	79 per cent, 1	-
60 per cent,		·	·			2	80 per cent, 1	2
71 per cent,	·	•	Ĭ.			1	85 per cent, 1	-
75 per cent,	•	•	•		_	4	90 per cent,	1
80 per cent,	:	Ċ	Ċ	Ċ	2	_ *	95 per cent, 1	_
88 per cent,	•	•	•	:	1	_	100 per cent, 1	_
oo per cent,	•	•	•	•		_		
39	weel	ts.			4	10	42 weeks. 14	23
25 per cent,						1	40 per cent,	1
33 per cent,					1	_	48 per cent,	1
35 per cent,					_	1	50 per cent, 3	4
50 per cent,					1	_	60 per cent,	1
60 per cent,					_	1	61 per cent,	1
65 per cent,					_	2	65 per cent,	3
67 per cent,					_	1	67 per cent, 1	_
70 per cent,					_	1	70 per cent, 1	2
75 per cent,					2	1	72 per cent,	1
78 per cent,					_	1	75 per cent, 6	8
00 per cent,					_	1	80 per cent, I	_
							83 per cent, 1	-
	weei	ks.			56	11	88 per cent, 1	_
25 per cent,	٠	٠	•	٠	-	1	90 per cent,	1
30 per cent,	٠	•	•	•	1	1		
33 per cent,	•	•		•	3	-	43 weeks. 22	25
40 per cent,	•			٠	2	-	33 per cent, 1	-
50 per cent,					8	-	40 per cent,	1
60 per cent,	•	٠	•		11	1	45 per cent, 1	-
67 per cent,					7	2	50 per cent, 1	5
68 per cent,					-	1	60 per cent, 3	1
70 per cent,		٠		٠	1	1	67 per cent, 3	1
75 per cent,			•	•	12	-	70 per cent, 1	2
79 per cent,				•	1	-	72 per cent,	1
80 per cent,					5	3	75 per cent, 1	7
83 per cent,					1	-	80 per cent, 4	2
85 per cent,					1	_	82 per cent,	1

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued.

COMPARISON FOR ALL INDUSTRIES. WEEKS IN OPERATION,

AND PERCENTAGES—1888, 1889—Continued.

WEEKS IN O			.ND		TAB- MENTS	WEEKS IN OPER		AND			TAB- TENTS
PERCE	NTAGES	3.		1888	1889	PERCENT	AGES.			1888.	1889
43 week	s — Co	11.				46 we	eks.			38	48
85 per cent,				1	1	20 per cent, .				1	-
90 per cent,				1		25 per cent, .				-	1
94 per cent,				_	1	33 per cent, .				-	1
95 per cent,				1	1	50 per cent, .				4	6
100 per cent,				4	1	52 per cent, .				1	_
200 por 00,						53 per cent, .				_	1
44 u	reeks.			25	25	55 per cent, .				1	_
25 per cent,				1	2	60 per cent, .				1	7
30 per cent,				1	1	65 per cent, .				2	4
33 per cent,				2	-	66 per cent, .				1	_
40 per cent,				1	-	67 per cent, .			·	1	3
46 per cent,				_	1	70 per cent, .			Ť	1	2
50 per cent,				1	5	75 per cent, .	:		•	7	8
55 per cent,				_	1	F 0	·	•	•		2
56 per cent,				1	_	80 per cent, .	•	•	•	4	4
60 per cent,				_	2	_	•	•	•	2	1
67 per cent,				2	1	83 per cent, .	•	•	•	2	3
70 per cent,				2	_	85 per cent, .	•	•	•	1	-
73 per cent,				1	1	86 per cent, .	•	•	•	i	
				3	3	87 per cent,	•	•	•	1	_
75 per cent,		•	•	3	2	90 per cent, .	•	•	٠	4	6
80 per cent,		•	•		1	92 per cent, .	•	•	•	· 1	-
83 per cent,		•		-	_	100 per cent, .	•	•	٠	. 3	-
84 per cent,		•	•	1	i .						
85 per cent,		•		1	-	47 we	eks.			36	53
87 per cent,			•	1	_	20 per cent, .				-	1
88 per cent,		•	•	-	1	25 per cent, .				_	1
90 per cent,		•		-	3	30 per cent, .				_	2
97 per cent,		•	•	-	1	33 per cent, .				1	1
100 per cent,		•	•	1	-	35 per cent, .				1	_
15 2	weeks.			52	34	40 per cent, .				_	2
25 per cent,				1	2	50 per cent,				3	3
45 per cent,			•	1	_	60 per cent,			i	_	2
					3	64 per cent,				_	,1
50 per cent,		•		11		65 per cent,	•	Ċ		2	
55 per cent,			•	1	-	-	•			1	5
57 per cent,				1	_	67 per cent,	•	•	•	2	2
60 per cent,		•		2	3	70 per cent,	•	•	•	1	_
65 per cent,				2	1	72 per cent,	•	•	•	_	1
66 per cent,				2	-	74 per cent, .	•	٠	•	5	12
67 per cent,				3	1	75 per cent,	•	•	•		
70 per cent,				5	2	78 per cent,	•	•	٠	-	1
75 per cent,			•	11	8	80 per cent, .	•	٠	•	6	6
78 per cent,			•	-	2	85 per cent,	•	•	•	1	1
80 per cent,				7	2	87 per cent,	•	•	٠	-	2
85 per cent,				1	2	90 per cent, .	•	•	٠	6	6
88 per cent,				-	1	92 per cent, .		٠	•	4	2
90 per cent,				3	4	94 per cent,	•	•	٠	1	-
100 per cent,				1	3	100 per cent,				2	2

PROPORTION OF BUSINESS DONE: BY INDUSTRIES - Continued. COMPARISON FOR ALL INDUSTRIES. WEEKS IN OPERATION, AND PERCENTAGES — 1888, 1889 — Continued.

WEEKS IN O				ND		TAB- HENTS	WEEKS IN OPERATION, AND LISH	TAB- MENTS
PERCE	ENTA	AGES.			1888	1889	PERCENTAGES. 1888	1889
481	neel	ks.			71	80	49 weeks — Con.	
10 per cent,	•					1	76 per cent,	1
25 per cent,					_	2	78 per cent,	1
32 per cent,					1	_	80 per cent,	8
33 per cent,				·	1	1	81 per cent,	_
40 per cent,					1	2	83 per cent, 1	2
50 per cent,					8	5	85 per cent,	1
60 per cent,					3	5	87 per cent,	1
63 per cent,					_	1	89 per cent,	1
65 per cent,					1	3	90 per cent,	12
66 per cent,		Ĭ.	i.	·	2	_	91 per cent,	1
67 per cent,		Ċ	·		8	4	92 per cent,	_
70 per cent,	Ċ	•	•	•	_	3	93 per cent,	2
75 per cent,	:	Ċ			12	17	01	1
78 per cent,	•	•	•		2	- 1.	95 per cent,	6
80 per cent,	•	•	•	•		7	00	6
82 per cent,	•	٠	٠	•	8		07	2
83 per cent,	•	•	•		-	1	00	1
	•	•	•	•	1	-		13
84 per cent,	•	•	•	•	1	-	100 per cent,	15
85 per cent,	•	•	•	٠	2	5	50 weeks. 227	269
89 per cent,	•	•	•	•	1	-	17 per cent, 1	2
90 per cent,	•	•	•	•	5	7	20 per cent, 1	1
91 per cent,		•	•	•	-	. 1	25 per cent, 1	1
92 per cent,	•	•	•	•	-	1	33 per cent, 2	4
93 per cent,	•	٠	٠	•	-	1	34 per cent, 1	-
94 per cent,	•		•		-	4	35 per cent,	2
95 per cent,	•	٠	•	•	2	3	40 per cent, 2	3
96 per cent,	•		•		-	1	42 per cent,	1
97 per cent,	•	٠	•	•	2	-	43 per cent, 1	_
00 per c ent,	•	•			10	5	44 per cent,	1
49 w	e ek	8.			63	101	45 per cent, 1	2
33 per cent,					1	-	50 per cent, 17	25
35 per cent,				.	1	1	54 per cent, 1	_
10 per cent,					-	1	55 per cent,	1
50 per cent,					2	7	56 per cent,	1
54 per cent,					_	1	57 per cent,	1
55 per cent,					1	_	60 per cent,	9
59 per cent,				.		1	63 per cent,	_
60 per cent,					1	5	64 per cent,	1
63 per cent,		•			1	_	65 per cent,	6
55 per cent,	•		·		1	2	66 per cent,	2
66 per cent,					1		67 per cent,	s
37 per cent,			•		4	5	70 per cent,	11
68 per cent,	•	•			1	-	71 per cent,	1
70 per cent,		•			3	3	***	-
71 per cent,	•	•			0	1	74 per cent,	61
-		•	•		-			
72 per cent,	•	•	•	•	-	1	77 per cent,	1
75 per cent,	•	•	•	•	10	11	78 per cent, 1	-

PROPORTION OF BUSINESS DONE: BY INDUSTRIES—Continued. COMPARISON FOR ALL INDUSTRIES. WEEKS IN OPERATION, AND PERCENTAGES—1888, 1889—Continued.

WEEKS IN OPER	ATION	, ANI)		TAB- MENTS	WEEKS IN O			AND			AB- IENTS
Percent	AGES.			1888	1889	PERCI	ENTAGI	Es.			1888	1889
50 weeks -	- Con.					51 wee	ks — (Con.				
80 per cent, .				15	21	68 per cent,					2	1
83 per cent, .				1	1	69 per cent,				٠.	1	-
85 per cent, .				8	6	70 per cent,					21	17
86 per cent, .				1	_	71 per cent,					1	-
87 per cent, .				1	1	72 per cent,					_	3
88 per cent, .				1	5	75 per cent,					88	102
89 per cent, .				1	_ '	76 per cent,					1	1
90 per cent, .				31	23	78 per cent,					2	2
ol per cent, .				_	1	80 per cent,					38	27
92 per cent, .				_	5	81 per cent,					1	1
95 per cent, .	•	÷		9	8	82 per cent,	·	•			_	3
96 per cent, .	•	:	:	4	3	83 per cent,		:	:			2
of per cent, .	•	•	:	2	3	84 per cent,	•	•	:	•	2	1
	•	•		5	3	85 per cent,	•	•		•	20	22
98 per cent, .	•	•	•		-		•	•	•	•	20	1
99 per cent, .	•	٠	•	1	1	86 per cent,	•	•	•	•	2	2
00 per cent, .	•	•	•	36	44	87 per cent,	•	•	•	•		
51 week	ks.			675	565	88 per cent,	•	•	•	•	5	2
0 per cent, .				1	_	90 per cent,	•	•	•	•	50	44
3 per cent,	•	•	Ċ	1		91 per cent,	•	•	•	•	3	2
_	•	•		1	• -	92 per cent,	•	•	•	٠	3	1
5 per cent, .	•	•	•	1	_	93 per cent,	•	•	•	•	1	3
8 per cent, .	•	•	٠	_	2	94 per cent,	•	•	•	•	1	-
o per cent, .	•	•	•			95 per cent,	•	•	•	•	14	13
5 per cent, .	•	•	•	6	5	96 per cent,	•	•	•	٠	2	1
30 per cent, .	•	•	•	2	2	97 per cent,		•	•		3	4
3 per cent, .	•	•	٠	8	6	98 per cent,		•	•		7	4
35 per cent, .	•	•	•	2	1	99 per cent,					4	3
10 per cent, .	•	•	•	1	1	100 per cent,					245	195
4 per cent, .	•	•	•	-	1							
15 per cent, .	•	٠	•	3	-		Weeks				15	49
49 per cent, .	•	٠	٠	1	-	33 per cent,	•	•	•	•	_	1
50 per cent, .	•	•	٠	55	42	50 per cent,	•	•	•	•	3	2
52 per cent, .		•	٠	-	1	60 per cent,	٠	٠	•	٠	2	4
3 per cent, .		•	•	1	-	65 per cent,	•	•	•	٠	-	1
55 per cent, .					6	66 per cent,			•		-	1
66 per cent, .				3	-	69 per cent,	•			٠	-	1
58 per cent, .				1	1	73 per cent,				٠	-	1
0 per cent, .				19	17	75 per cent,					1	5
31 per cent, .				1	-	78 per cent,					-	1
32 per cent, .				1	-	80 per cent,					2	8
63 per cent, .				5	1	90 per cent,					-	4
34 per cent, .				1	_	95 per cent,					-	3
35 per cent, .				12	8	96 per cent,					-	1
66 per cent, .				6	4	99 per cent,					-	1
						· ·					7	15

PROPORTION OF BUSINESS DONE: BY INDUSTRIES - Continued. COMPARISON FOR ALL INDUSTRIES. WEEKS IN OPERATION, AND PERCENTAGES - 1888, 1889 - Continued.

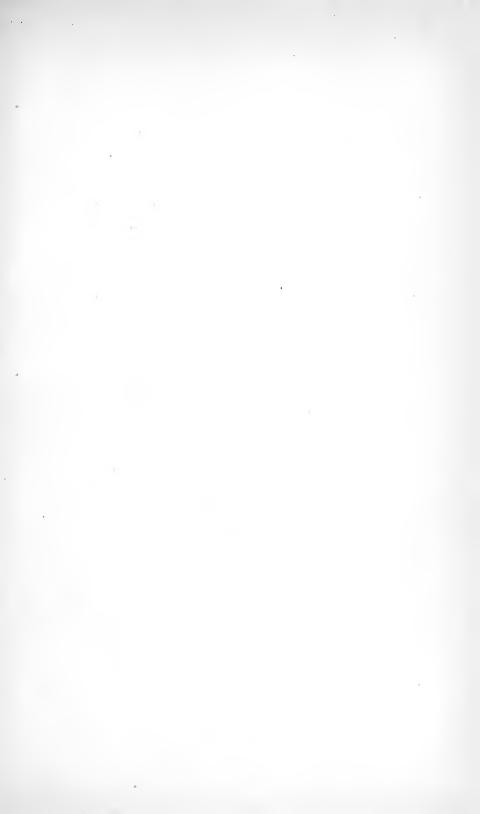
RECAPITULATION. WEEKS IN OPERATION - 1888, 1889.

	X*.	UMBEI	D 0 D	Wnn	TV	Opp						. ESTABLIS	SHMENTS
•	-/1	UMBEI	K OF	WEE	KS 15	OPE	KATI	ON.				1888	1889
7 weeks,												_	1
9 weeks,											.	1	-
13 weeks,												1	-
17 weeks,											.	-	ã
19 weeks,												-]
20 weeks,											.	-	1
21 weeks,											.	1	1
22 weeks,										٠.	.	1	1
23 weeks,											.	2	1
24 weeks,											.	1	8
25 weeks,											. [2	8
26 weeks,											:	7	2
27 weeks.												_	-
28 weeks,											.	2	
29 weeks,													1
30 weeks,	•	Ċ		Ť	·	Ċ	·	Ť	·	·		6	
31 weeks,	Ċ	i		·				•	Ċ			_	1
32 weeks,	Ċ	•	Ċ	·	•	·	•	•	•	Ċ		4	1
33 weeks,	٠	•	Ċ	•	•	•	•	•	•	٠		2	(
84 weeks,				Ċ	•	:	•	•	٠	•		7	ų
35 weeks,	٠	•	٠	٠	•	•	•	•	•	•	.	7	4
36 weeks,	•	•	•	•	•	•	•	•	•	•	.	6	-
37 weeks,	٠	•	•	•	•	•	•	•	•	•		2	4
38 weeks,	•	•	•	٠	•	•	•	•	•	•		5	10
39 weeks,	•	•	•	•	•	•	•	•	•	•		4	10
	•	•	•	•	•	•	•	•	•	•	٠	. 56	11
40 weeks,	•	•	•	•	•	•	•	•	•	•	.		
41 weeks,	٠	•	•	•	٠	•	•	•	•	•	. [9	10
42 weeks,	•	٠	•	•	٠		•	•	•	•		14	28
43 weeks,		•	•		٠	•	•	•	•	•	.	22	25
44 weeks,				•	•		•		•	•	.	25	25
45 weeks,	٠	•	•	•	•	•	٠	•	٠	٠	.	52	3-
46 weeks,	•	٠	٠	٠	•		•	٠	٠	٠	.	38	48
47 weeks,	•	•	•	٠	•	•	•	•	٠	٠		36	55
48 weeks,		٠			•				٠	•		71	80
49 weeks,	٠	٠	٠	٠			•	•	٠	٠		63	101
50 weeks,	٠		•	٠	٠	•	•	•	٠	٠		227	269
51 weeks,	٠		•	٠	•	٠	٠	٠	•	٠		675	565
52 weeks,	•		٠	٠	•	٠	•	•	•	٠		15	49
Тота	L, .											1,364	1,364

PROPORTION OF BUSINESS DONE: BY INDUSTRIES -- Concluded. COMPARISON FOR ALL INDUSTRIES WEEKS IN OPERATION, AND PERCENTAGES - 1888, 1889 - Concluded.

RECAPITULATION. WEEKS AND PERCENTAGES - 1888, 1889.

									AVERAGE PROPORTION OF BUSINESS I			
Num	BER	ог У	VEEK	SIN	Орен	ATIC	N		18	888	1:	889
									Estab- lishments	Percent- ages	Estab- lishments	Percent ages
7 weeks,									_	-	1	10.00
9 weeks,									1	100.00	-	-
13 weeks,									1	5.00	-	-
17 weeks,									- 1	-	5	32.80
19 weeks,			٠						-	-	1	5.00
20 weeks,									-	~	1	30.00
21 weeks,									1	40.00	1	30.00
22 weeks,									1	40.00	1	40.00
23 weeks,									2	32.50	1	80.00
24 weeks,									1	25.00	3	43.33
25 weeks,									2	57.50	3	55.00
26 weeks,									7	45.71	2	35.00
27 weeks,									-	-	1	42.00
28 weeks,									2	50.00	-	-
29 weeks,									-	-	1	50.00
30 weeks,									6	56.67	4	58.00
31 weeks,									-	-	1	40.00
32 weeks,									4	51.25	1	50.00
33 weeks,									2	62.50	6	46.17
34 weeks,		•							7	66.00	4	66.50
35 weeks,									7	60.43	4	52.00
36 weeks,									6	60.17	6	45.83
37 weeks,									2	86.50	4	55.50
38 weeks,			٠.						5	69.60	10	59.90
39 weeks,									4	58.25	10	64.00
10 weeks,									56	65.09	11	65.18
1 weeks,									9	71.67	10	68.50
2 weeks,			• 33						14	70.57	23	65.48
3 weeks,									22	74.73	25	70.80
4 weeks,									25	63.40	25	64.56
5 weeks,									52	67.40	34	73.12
6 weeks,								.	38	74.37	48	68.81
7 weeks,									36	76.92	53	70.60
8 weeks,								.	71	75.69	80	74.55
9 weeks,								.	63	80.17	101	80.65
0 weeks,								.	227	78.39	269	76.59
1 weeks,								.	675	81.81	565	82.19
2 weeks,									15	80.33	49	83.24
Тотаг									1,364	77.52	1,364	76.74





ANALYSIS.

[129]



ANALYSIS.

COMPARATIVE PRODUCT: BY ESTABLISHMENTS.

The tables representing comparative product cover pages 3 to 51 in this volume and present returns from 3,494 establishments manufacturing goods in this Commonwealth. The first subject treated analytically is "Comparative Product: By Establishments," pages 3 to 39. The establishments here considered made return of value of product for one or more of the three years, 1887, 1888, and 1889. The table exhibits the fluctuations in the value of product for the different establishments and is of value in showing these, and in forming the basis for two recapitulations, which are considered farther on in this volume, besides supplying the figures for three exhaustive analysis tables wherein the value of product is classified for each establishment, and the increase or decrease in value, with equivalent percentages, is given.

The absence of figures representing the value of goods made in any one of the columns devoted to the years 1887, 1888, or 1889, is explained in the head-note upon page 3. We would add further that in order to issue this report at an early date it is necessary to declare the enumeration closed upon a certain This was done on March 31, and all schedules received since that date were necessarily omitted from the tabulation of the statistics for 1889, which will account, in part, for the nonappearance of figures in the column for that year. Another reason for the absence of figures in this year is the recent disastrous fire at Lynn, in November, 1889, which destroyed a large number of boot and shoe factories. In 1888 a like fire caused a severe loss to boot and shoe manufacturers in Marblehead. and inasmuch as, in many cases, all books and accounts were destroyed no information could be secured for these years. The failure or even temporary embarrassment of a firm or corporation will often be a sufficient reason for not making a return, while the shutting down of a factory for repairs, on account of a strike, or for some other cause, will render it impossible to make a complete return covering a year's business.

The large number of establishments making return for 1889 and not for the previous years is explained by the fact that our mailing list for 1889 was extended by the addition of many names which had not been included since the Census of 1885. Thus it will be seen that the absence of figures in any of the years is perfectly legitimate and gives evidence of some event, not within the control of this office, which prevented a return from being made.

Each report on the Statistics of Manufactures is to be considered separately. That is to say in the comparative presentations in any report, the figures representing the value of goods made in any year will differ from those shown for the same year in previous reports. The reason for this is that certain establishments are taken in each year for purposes of comparison. The same establishments that are compared in the report for 1886 and 1887 may not be susceptible of comparison in the report for 1888. Some of the establishments may have been destroyed by fire or for some other reason a return may not have been made in time to compare with the previous year. This, as already explained, is unavoidable. These reports do not present the aggregate for all industries in the Commonwealth. They present the returns of the principal establishments in the leading industries in all cases where comparisons with the same establishment in some other year is possible.

As an elaborate review was made in the last report on the Statistics of Manufactures, of the returns of 1888 as compared with 1887, this volume will be devoted principally to the comparisons of 1889 with 1888. We refer the reader to the 1888 report for the comparison of 1888 with 1887.

Seventy-seven industries are considered in the first table. They are as follows:

Agricultural Implements.

Arms and Ammunition.

Artisans' Tools.

Awnings, Tents, and Decorations.

Boots and Shoes. Boxes (Paper and Wooden). Brick, Tiles, and Sewer Pipe. Brooms, Brushes, and Mops. Burial Cases, Caskets, Coffins, etc. Buttons and Dress Trimmings.

Carpetings.

Carriages and Wagons.

Cement, Kaolin, Lime, and Plaster. Chemical Preparations (Compound-

Clocks and Watches.

Clothing.

Cooking, Lighting, and Heating Apparatus.

Cordage and Twine. Corks, Bungs, and Taps.

Cotton Goods.

Cotton, Woollen, and Other Textiles. Crayons, Pencils, Crucibles, etc.

Drugs and Medicines.

Dyestuffs.

Earthen, Plaster, and Stone Ware. Electrical Apparatus and Appli-

Electroplating.

Emery and Sand Paper and Cloth,

Fancy Articles. Fertilizers.

Fine Arts and Taxidermy. Fireworks and Matches. Flax, Hemp, and Jute Goods.

Food Preparations.

Furniture. Glass.

Glue, Isinglass, and Starch.

Hair Work (Animal and Human).

Hose: Rubber, Linen, etc. Hosiery and Knit Goods. Ink, Mucilage, and Paste.

Ivory, Bone, Shell, and Horn Goods,

etc.

Jewelry Burnishing and Lapidary Work.

Leather.

Linen.

Liquors and Beverages (Not Spiritu-

Liquors: Malt, Distilled, and Fermented.

Lumber.

Machines and Machinery.

Metals and Metallic Goods.

Mixed Textiles.

Models and Patterns.

Musical Instruments and Materials.

Oils and Illuminating Fluids.

Paints, Colors, and Crude Chemicals.

Paper and Paper Goods.

Perfumes, Toilet Articles, etc.

Photographs and Photographic Materials.

Polishes and Dressing.

Printing, Publishing, and Bookbind-

Print Works, Dye Works, and Bleacheries.

Railroad Construction and Equipment.

Rubber and Elastic Goods.

Scientific Instruments and Appliances.

Shipbuilding.

Silk and Silk Goods.

Sporting and Athletic Goods.

Stone.

Straw and Palm Leaf Goods.

Tallow, Candles, Soap, and Grease.

Tobacco, Snuff, and Cigars.

Toys and Games (Children's).

Trunks and Valises.

Whips, Lashes, and Stocks.

Wooden Goods.

Woollen Goods.

Worsted Goods.

The recapitulation on pages 38 to 41 relates to the 3,494 establishments which made return of value of product for one or more of the three years, 1887, 1888, and 1889, and shows the respective number of establishments returning an increase, a decrease, or no change in the value of product, or not returning value of product. From this recapitulation we find

that, in all of the industries considered, 2,616 establishments report an increase in 1889, as compared with 1888; 2,763 an increase in 1889 as compared with 1887; 575 a decrease in 1889 as compared with 1888; and 468 a decrease in 1889 as compared with 1887.

In the table which follows we have reduced the figures, as given in the recapitulation on pages 38 to 41, to percentages of increase, of decrease, and of no change in the value of goods made, in 1889 as compared with 1888, and in 1889 as compared with 1887.

	1889	AS COMPA	ARED	1889	AS COMPA VITH 188:	ARED
Industries.	Perc	ENTAGES O	F —	PERC	ENTAGES O	F —
	Increase	Decrease	No change	Increase	Decrease	No change
Agricultural implements, .	75.00	25.00	_	62.50	37.50	_
Arms and ammunition, .	69.23	30.77	_	76.92	23.08	_
Artisans' tools,	82.61	13.04	4.35	86.96	8.69	4.35
Awnings, tents, and decora-				1		
tions.	100.00	_	_	100.00	_	_
Boots and shoes	72.82	23.27	3.91	80.99	17.94	1.07
Boxes (paper and wooden),	89.81	9.26	0.93	89.81	9.26	0.93
Brick, tiles, and sewer pipe,	100.00	-	_	100.00	-	-
Brooms, brushes, and mops,	100.00	_	_	100.00	_	_
Burial cases, caskets, cof-	100.00			,100.00		
fins, etc.,	87.50	12.50	_	100.00	_	_
Buttons and dress trim-	01.00	12.00			_	
mings,	78.57	21.43	_	85.71	14.29	
Carpetings,	100.00	21.10		92.86	7.14	_
Carriages and wagons,	87.50	10.94	1.56	87.50	12.50	_
Cement, kaolin, lime, and	01.00	10.04	1.00	01.50	12.00	_
plaster,	100.00			100.00		
Chemical preparations (com-	100.00	- 1	-	100.00	_	_
pounded),	71.43	28.57		71.43	28.57	
Clocks and watches,	$\begin{vmatrix} 71.45 \\ 85.71 \end{vmatrix}$	$\frac{26.57}{14.29}$	-	71.43	$\frac{28.57}{28.57}$	_
Clothing,	75.44	$\frac{14.29}{21.93}$	$\frac{-}{2.63}$	78.95	$\frac{26.37}{19.30}$	1.75
Cooking, lighting, and heat-	75.44	21.95	2.05	10.99	19.50	1.70
ing apparatus,	97.14	2.86		97.14	2.86	
Cordage and twine,	76.92	$\frac{2.80}{23.08}$	-	97.14 92.31	$\frac{2.80}{3.84}$	3.85
Corks, bungs, and taps,		25.08	- 1	$\begin{vmatrix} 92.31 \\ 100.00 \end{vmatrix}$	9.04	0.00
Cotton goods.	100.00	29.88	$\frac{-}{1.22}$		18.90	1.22
Cotton goods, Cotton, woollen, and other	68.90	29.00	1.22	79.88	18.90	1.22
textiles	33.33	66.67	1	66.67	33.33	
	00.00	00.07	_	00.07	99.99	_
Crayons, pencils, erucibles,	100.00	1		100 00		
etc.,	100.00	-	-	100.00	-	_
Drugs and medicines,	100.00	-	-	100.00	-	-
Dyestuffs,	100.00	-	-	100.00	_	-
Earthen, plaster, and stone	100 00			100 00		
ware,	100.00	-	-	100.00	-	-
Electrical apparatus and	100 00			100 00		
appliances,	100.00	-	-	100.00	-	-

	1889 V	AS COMP.	ARED	1889	AS COMPA	ARED
Industries.	PER	CENTAGES C)F —	PERG	ENTAGES O	F —
	Increase	Decrease	No change	Increase	Decrease	No change
Electroplating, Emery and sand paper and	100.00	_	_	100.00	_	_
cloth, etc.,	100.00	_	_	90.91	9.09	-
Fancy articles,	100.00	-	-	100.00	_	_
Fertilizers,	75.00	_	25.00	100.00	-	_
Fine arts and taxidermy, .	100.00	-	-	100.00	-	. –
Fireworks and matches,	100.00	-	_	100.00	20 00	_
Flax, hemp, and jute goods,	60.00	40.00	1 7	80.00	20.00	1 90
Food preparations,	83.48	14.78	1.74	89.13	9.57	1.30
Furniture,	81.30	13.01	5.69	$79.67 \\ 66.67$	$17.89 \\ 33.33$	2.44
Glass,	$\begin{vmatrix} 66.67 \\ 100.00 \end{vmatrix}$	33.33	_	100.00	55.55	_
Hair work (animal and	100.00	_	_	100.00	_	_
human),	100.00	_		100.00	_	_
Hose: rubber, linen, etc.,	80.00	20.00	_	100.00	_	_
Hosiery and knit goods, .	81.25	18.75	_	81.25	18.75	_
Ink, mucilage, and paste, .	100.00	-	_	100.00	_	_
Ivory, bone, shell, and horn						
goods, etc.,	100.00	_	_	100.00	_	_
Jewelry burnishing and						
lapidary work,	100.00	-	_	100.00	-	_
Leather,	65.16	33.55	1.29	69.68	29.68	0.64
Linen,	-	100.00	-	33.33	66.67	-
Liquors and beverages (not	400 00			100 00		
spirituous),	100.00	_	-	100.00	_	_
Liquors: malt, distilled, and	00 40	28.95	0.00	71.05	26.32	2.63
fermented,	$\begin{vmatrix} 68.42 \\ 95.45 \end{vmatrix}$	$\frac{28.95}{4.55}$	2.63	95.45	$\frac{20.52}{4.55}$	2.00
Lumber,	82.26	15.59	2.15	88.17	11.29	0.54
Metals and metallic goods,	81.88	17.77	$\begin{bmatrix} 2.15 \\ 0.35 \end{bmatrix}$	88.15	11.85	-
Mixed textiles,	58.82	35.30	5.88	52.94	47.06	_
Models and patterns,	100.00	_	-	100.00	_	_
Musical instruments and	100.00					
materials,	83.72	11.63	4.65	81.40	18.60	_
Oils and illuminating fluids,	88.89	11.11	-	88.89	11.11	_
Paints, colors, and crude						
chemicals,	100.00	- 1	-	100.00		-
Paper and paper goods, .	75.00	25.00	-	85.23	14.77	-
Perfumes, toilet articles,	400 00			700 00		
etc.,	100.00	-	-	100.00	-	-
Photographs and photo-	100 00			100 00		
graphic materials,	100.00	_	-	100.00	-	_
Polishes and dressing, .	100.00	_	_	100.00	_	_
Printing, publishing, and bookbinding,	100.00		_	100.00	_	_
Print works, dye works, and	100.00		_	100.00		
bleacheries,	72.73	27.27	_	63.64	36.36	
Railroad construction and		2		33.01	00.00	
equipment,	100.00	_	_	100.00	_	-
Rubber and elastic goods, .	75.76	24.24	_	72.73	27.27	_
Scientific instruments and						
appliances,	100.00	-	-	100.00	-	_
Shipbuilding,	91.18	5.88	2.94	100.00	-	-

		AS COMPA			AS COMPA		
Industries.	PERC	ENTAGES O	F-	Percentages of -			
	Increase	Decrease	No change	Increase	Decrease	No change	
Silk and silk goods, . Sporting and athletic goods, Stone,	35.30 95.24	30.00 - 17.65 58.82 4.76	1.47· 5.88	80.00 100.00 89.71 47.06	20.00 10.29 52.94	- - - - 2.38	
Tobacco, snuff, and eigars,. Toys and games (children's),	100.00	_	-	100.00	_	-	
Trunks and valises,	100.00 100.00 92.31	7.69	_	100.00	_	_	
Whips, lashes, and stocks, . Wooden goods, Woollen goods,	92.51 91.40 73.68	$7.53 \ 22.56$	$\begin{array}{c} - \\ 1.07 \\ 3.76 \end{array}$	92.47	7.53 23.31	-	
Worsted goods,	75.00	20.00	5.00	70.00	30.00	_	
ALL INDUSTRIES,	80.39	17.67	1.94	84.91	14.38	0.71	

It should be clearly understood that these percentages relate to the establishments making return of value of product for one or more years, and are based upon the value of goods made in such establishments. Establishments reporting value of product in 1889 and not in 1887 or 1888, have been classified as showing an increase above the previous years, but the establishments failing to report value of goods made in 1889 are classified under "Not Given," and are not factors in the preparation of this analysis table, so far as 1889 is concerned.

The boot and shoe industry, to a greater extent than any other, has, for the past two or three years, suffered from fire; but the evil results, so far as particular establishments are concerned, do not appear in this volume for the reason that the comparisons here made are for identical establishments, in the different years, and the loss of a factory and consequent non-return of a schedule, would necessarily prevent any comparison being made of the value of product for two consecutive years. Comparing 1889 with 1888, we find that 72.82 per cent of the establishments report an increase in the value of goods made, 23.27 per cent a decrease, and 3.91 per cent no change; in 1889 as compared with 1887, 80.99 per cent show an increase, 17.94 per cent a decrease, and 1.07 per cent no change.

The exhibit in Carpetings is quite remarkable; 100 per cent

of the establishments reporting an increase in the value of product in 1889 over 1888. Comparing 1889 with 1887 the margin of increase is still seen to be high, 92.86 per cent reporting an increase, while only 7.14 per cent report a decrease.

In Carriages and Wagons, comparing the establishments making return of value of product in 1889 with the same establishments in 1888, we find that 87.50 per cent report an increase, 10.94 per cent a decrease, and 1.56 per cent no change. In 1889 as compared with 1887, the same percentage (87.50) of establishments report an increase and 12.50 per cent a decrease.

Comparing the value of goods made in the clothing industry for 1889 with 1888, it is seen that 75.44 per cent of the establishments show an increase, 21.93 per cent a decrease, and 2.63 per cent no change; while in 1889 as compared with 1887, 78.95 per cent report an increase, 19.30 per cent a decrease, and 1.75 per cent no change.

Making a similar comparison for Cotton Goods, it is noted that 68.90 per cent of the establishments report an increase, 29.88 per cent a decrease, and 1.22 per cent no change, in 1889 as compared with the previous year. A larger number of establishments, or 79.88 per cent, report an increase in 1889 as compared with 1887, while only 18.90 per cent show a decrease, and the same percentage (1.22) no change.

Of the establishments, the product of which is classed under Food Preparations, 83.48 per cent report an increase, 14.78 per cent a decrease, and 1.74 per cent no change, in 1889 as against 1888. In 1889 compared with 1887, 89.13 per cent show an increase, 9.57 per cent a decrease, and 1.30 per cent, no change.

In the furniture industry in 1889, 81.30 per cent of the establishments report an increase over 1888, 79.67 per cent an increase over 1887, 13.01 per cent a decrease compared with 1888, and 17 89 per cent a decrease compared with 1887; while 5.69 per cent report no change in 1889 as compared with 1888, and 2.44 per cent no change when compared with 1887.

In the manufacture of hosiery and knit goods, 81.25 per cent of the establishments report an increase and 18.75 per cent a decrease in 1889 over 1888, and the same conditions obtain in 1889 when compared with 1887.

The leather industry has suffered in a manner different from Boots and Shoes, inasmuch as large losses have been entailed by the fluctuating condition of the leather market; the same establishments, as here brought into comparison, exhibit a healthy improvement over previous years, although the aggregate increase is still small. In 1889 as compared with 1888, 65.16 per cent of the establishments report an increase, and 69.68 per cent an increase as compared with 1887. This increase is small but it is encouraging, as are the reduced percentages of decrease: 33.55 per cent in 1889 as against 1888, and 29.68 per cent in 1889 as against 1887. No change is reported by 1.29 per cent of the establishments in 1889 as compared with 1888 and 0.64 per cent in 1889 as compared with 1887.

Of the establishments classed under the head of Machines and Machinery, 82.26 per cent report an increase, 15.59 per cent a decrease, and 2.15 per cent no change, in value of goods made in 1889 as compared with 1888; in comparison with 1887, in the same industry, 88.17 per cent show an increase, 11.29 per cent a decrease, and 0.54 per cent no change.

Of the establishments in the metal and metallic goods industry in 1889, when compared with 1888, 81.88 per cent exhibit an increase, 17.77 per cent a decrease, and 0.35 per cent no change; when compared with 1887, 88.15 per cent show an increase and 11.85 per cent a decrease.

In the manufacture of mixed textiles, 58.82 per cent of the establishments show an increase in 1889 as compared with the previous year, 35.30 per cent a decrease, and 5.88 per cent no change; while in 1889 as compared with 1887, 52.94 per cent report an increase and 47.06 per cent a decrease.

In the paper and paper goods industry in 1889, 75 per cent of the establishments report an increase in value of product, compared with that for 1888, and 25 per cent a decrease; while if we compare with 1887, the number reporting an increase rises to 85.23 per cent with but 14.77 per cent showing a decrease.

The establishments classified under Print Works, Dye Works, and Bleacheries show, in 1889 as compared with 1888, an increase in the value of goods made as regards 72.73 per cent and a decrease as regards 27.27 per cent; and in the same industry, 63.64 per cent report an increase and 36.36

per cent a decrease when 1889 is placed in comparison with 1887.

In the manufacture of rubber and elastic goods, 75.76 per cent of the establishments show an increase in value of product in 1889 as compared with 1888, and 24.24 per cent a decrease. In 1889 as compared with 1887 only 72.73 per cent show an increase while the number reporting a decrease rises to 27.27 per cent.

Of the establishments, the product of which is classed under the head of Silk and Silk Goods, 70 per cent report an increase in 1889 over the previous year and 30 per cent a decrease. In 1889, compared with 1887, the number showing an increase rises to 80 per cent and the number reporting a decrease falls to 20 per cent.

In Woollen Goods, increase in value of product is reported in 1889 over 1888 by 73.68 per cent of the establishments for which comparative returns are made; 22.56 per cent report a decrease and 3.76 per cent no change. In 1889 increase in the value of product over that shown in 1887 is seen in 76.69 per cent of the establishments and a decrease in 23.31 per cent.

In Worsted Goods in 1889, an increase in the value of product is noted in 75 per cent of the establishments, a decrease in 20 per cent, and no change in 5 per cent, as compared with 1888; while, as compared with 1887, increase is reported for 70 per cent and decrease for 30 per cent of the establishments.

In all the industries considered, we find, in comparing 1889 with 1888, that 80.39 per cent of the establishments report an increase in the value of product, 17.67 per cent a decrease, and 1.94 per cent no change. Comparing the same year with 1887, it is seen that 84.91 per cent show an increase, 14.38 per cent a decrease, and 0.71 per cent no change.

In the comparison between the years 1888 and 1889, the following industries show a percentage of increase greater than that shown for all industries:

Artisans' Tools.
Awnings, Tents, and Decorations.
Boxes (Paper and Wooden).
Brick, Tiles, and Sewer Pipe.
Brooms, Brushes, and Mops.

Burial Cases, Caskets, Cossins, etc. Carpetings.
Carriages and Wagons.
Cement, Kaolin, Lime, and Plaster.
Clocks and Watches.

Cooking, Lighting, and Heating Apparatus.

Corks, Bungs, and Taps.

Crayons, Pencils, Crucibles, etc.

Drugs and Medicines.

Dyestuffs.

Earthen, Plaster, and Stone Ware. Electrical Apparatus and Appli-

ances.

Electroplating.

Emery and Sand Paper and Cloth,

Fancy Articles.

Fine Arts and Taxidermy. Fireworks and Matches. Food Preparations.

Tood Tieparan

Furniture.

Glue, Isinglass, and Starch.

Hair Work (Animal and Human).

Hosiery and Knit Goods. Ink, Mucilage, and Paste.

Ivory, Bone, Shell, and Horn Goods, etc.

Jewelry Burnishing and Lapidary Work.

Liquors and Beverages (Not Spirituous).

Lumber.

Machines and Machinery. Metals and Metallic Goods.

Models and Patterns.

Musical Instruments and Materials.

Oils and Illuminating Fluids.

Paints, Colors, and Crude Chemicals.

Perfumes, Toilet Articles, etc.

Photographs and Photographic Materials.

Polishes and Dressing.

Printing, Publishing, and Bookbinding. Railroad Construction and Equipment. Scientific Instruments and Appliances.

Shipbuilding.

Sporting and Athletic Goods.

Stone.

Tallow, Candles, Soap, and Grease.

Tobacco, Snuff, and Cigars. Toys and Games (Children's).

Trunks and Valises.

Whips, Lashes, and Stocks.

Wooden Goods.

The industries showing a percentage of increase less than that shown for all industries, in the same years, are as follows:

Agricultural Implements.

Arms and Ammunition.

Boots and Shoes.

Buttons and Dress Trimmings.

Chemical Preparations (Compounded).

Clothing.

Cordage and Twine.

Cotton Goods.

Cotton, Woollen, and Other Tex-

Fertilizers

Flax, Hemp, and Jute Goods.

Glass.

Hose: Rubber, Linen, etc.

Leather. Linen.

Liquors: Malt, Distilled, and Fer-

mented.
Mixed Textiles.

Paper and Paper Goods.

Print Works, Dye Works, and Bleacheries.

Rubber and Elastic Goods.

Silk and Silk Goods.

Straw and Palm Leaf Goods.

Woollen Goods.
Worsted Goods.

For the purpose of further comparison we consolidate into classes the returns made by the 3,494 establishments, as presented in the table on pages 3 to 39, and obtain a comparison

for the same establishments, between the years 1888 and 1889, on the basis of value of goods made, in the following table:

CLASSIFIED VALUE OF		Number	VALUE OF (Joods Made	Increase (+), Per-
GOODS MADE IN EACH ESTABLISHMENT.	Class	Estab- lish- ments	1888	1889	Decrease (—), cent- in 1889 ages
Under \$20,000	1	30	\$334,608	\$426,768	+\$92,160 +27.54
\$20,000 but under \$25,000	2	20	446,247	471,328	+25.081 $+5.62$
\$25,000 but under \$50,000	3	121	4,609,934	5,026,669	+416,735 +9.04
\$50,000 but under \$100,000	4	337	24,239,708	24,916,704	+676,996 + 2.79
\$100,000 but under \$200,000	5	181	43,703,238	45,417,923	+1,714,685 $+3.92$
\$200,000 but under \$300,000	6	100	34,343,475	34,340,599	-2,876 -0.01
\$300,000 but under \$400,000	7	57	24,901,785	24,980,362	+78,577 $+0.32$
\$400,000 but under \$500,000	8	338	47,611,429	49,989,122	+2,377,693 $+4.99$
\$500,000 but under \$1,000,000	9	109	74,267,170	77,296,471	+3,029,301 +4.08
\$1,000,000 but under \$2,000,000	10	51	64,631,346	67,518,919	+2,887,573 +4.47
\$2,000,000 and over	11	20	74,954,026	73,312,093	-1,641,933 -2.19
TOTALS,		1,364	\$394,042,966	\$403,696,958	+\$9,653,992 +2.45

In this table the returns for the 1,364 establishments are arranged, according to the value of product in 1888, in eleven classes, the lowest class including establishments whose annual product was under \$20,000, and the highest class having an annual product of \$2,000,000 and over. In the first class, 30 establishments are represented having an aggregate product in 1888 of \$334,608 and in 1889 of \$426,768, showing an increase of \$92,160, or 27.54 per cent. The second class in the table comprises 20 establishments, turning out a product of \$20,000 or over, but under \$25,000, and the aggregate value of product in 1888 was \$446,247; in 1889, this increased to \$471,328, or 5.62 per cent. In the third class, 121 establishments are reported, each having a product of \$25,000 or over, but under \$50,000, with an aggregate value of product of \$4,609,934 in 1888 and \$5,026,669 in 1889; the aggregate increase was \$416,735, or 9.04 per cent.

The fourth class comprises those establishments which have an annual product of \$50,000 or over, but under \$100,000, the number of establishments represented being 337. In 1888, the aggregate value of goods made amounted to \$24,239,708 increasing to \$24,916,704 in 1889, a gain of 2.79 per cent. The fifth class is devoted to those establishments turning out an annual product of \$100,000 or over, but under \$200,000. The establishments number 181 and produced goods to the value of \$43,703,238 in 1888 and \$45,417,923 in 1889; the aggregate increase being \$1,714,685, or 3.92 per cent. Class six includes

100 establishments in each of which the value of product was \$200,000 or over, but under \$300,000. The aggregate value of goods made in the establishments in this class was \$34,-343,475 in 1888, and \$34,340,599 in 1889, the decrease in value being \$2,876, or 0.01 per cent. The 57 establishments in the seventh class, each with a product value of \$300,000 or over, but under \$400,000, produced goods to the amount of \$24,901,785 in 1888, and \$24,980,362 in 1889; the increase being \$78,577, or 0.32 per cent.

The eighth class comprises 338 establishments, each having a product of \$400,000 or over, but under \$500,000. value of goods made in 1888 was \$47,611,429, and in 1889, \$49,989,122, an increase of \$2,377,693, or 4.99 per cent. The 109 establishments in the ninth class, each reporting an annual output of \$500,000 or over, but under \$1,000,000, had an aggregate value of product in 1888, of \$74,267,170, and, in 1889, of \$77,296,471, the increase being \$3,029,301, or 4.08 per cent. The tenth class comprises 51 establishments, in each of which the product value was \$1,000,000 or over, but under \$2,000,000. In 1889, compared with 1888, an increase of \$2,-887,573, or 4.47 per cent is noted. In class eleven there are 20 establishments, each having a product value of \$2,000,000 and over, the aggregate being \$74,954,026 in 1888, and \$73,-312,093 in 1889, a loss of \$1,641,933, or 2.19 per cent. establishments in all classes number 1,364, the aggregate value of goods made being \$394,042,966 in 1888 and \$403,696,958 m 1889, an increase of \$9,653,992, or 2.45 per cent.

The following table presents a similar comparison for 1,171 establishments for the years 1887 and 1888.

Classified Value of	611	Number of Fotob	VALUE OF	GOODS MADE	Increase (+),	Per-
GOODS MADE IN EACH ESTABLISHMENT.	Class	Estab- lish- ments	1887	1888	Decrease (—), in 1888	cent- ages
Under \$20,000	1	26	\$311,811	\$671,783	+\$359,972	
\$20,000 but uuder \$25,000 \$25,000 but under \$50,000	2 3	98	154,409 3,879,921	167,040 4,303,191	+12,631 +423,270	
\$50,000 but under \$100,000 \$100,000 but under \$200,000	. 4	302 312	21,275,730 44,656,120	22,757,566 46,988,713	+1,481,836 +2,332,593	
\$200,000 but under \$300,000 \$300,000 but under \$400,000	6	140 91	34,251,793 30,795,187	35,535,330 31,266,594	+1,283,537 $+471,407$	+3.75
\$400,000 but under \$500,000 \$500,000 but under \$1,000,000	8 9	50 91	21,770,759 62,157,865	23,300,076 63,864,640	+1,529,317 $+1,i06,775$	+7.02
\$1,000,000 but under \$2,000,000	10	38	50,102,292	50,214,251	+111,959	+0.22
						<u> </u>
\$2,000,000 and over	11	1,171	\$316,055,260	\$326,731,717	+963,160	+3

The establishments, in the preceding table, are classified in the same manner as in the first one presented. In class one, numbering 26 establishments, the increase in value of product was 15.45 per cent. In the second class, numbering seven establishments, the increase was 8.18 per cent. In the third class, 98 establishments, the increase was 10.91 per cent. In the fourth class, 302 establishments, the increase was 6.96 per cent. In the fifth class, 312 establishments, the increase was 5.22 per cent. In the sixth class, 140 establishments, the increase was 3.75 per cent. In the seventh class, 91 establishments, the increase was 1.53 per cent. In the eighth class are found 50 establishments with an increase of 7.02 per cent. In the ninth class, comprising 91 establishments, the increase was 2.75 per cent. In the tenth class, 38 establishments, the increase was 0.22 per cent; and the eleventh class, with 16 establishments, shows an increase of 2.06 per cent. The following classes show a percentage of increase greater than that shown for all classes: first, second, third, fourth, fifth, sixth, and eighth. The 1,171 establishments had an aggregate value of product of \$316,055,260 in 1887, and \$326,731,717 in 1888, an increase of 3.38 per cent.

It is possible to indicate the variations in the value of product for the year 1887 and 1889, and to this end we present a table prepared upon the same lines as those immediately preceding, but basing the comparisons upon the returns from 1,155 establishments.

CLASSIFIED VALUE OF		Number	VALUE OF (Goods Made	Increase (+), Per-
GOODS MADE IN EACH ESTABLISHMENT.	Class	Estab- lish- ments	1887	1889	Decrease (-), cent- in 1889
Under \$20,000	1	34	\$396,081	\$646,690	+\$250,609 +63.27
\$20,000 but under \$25,000	2	9	201,327	255,441	+54,114 +26.88
\$25,000 but under \$50,000	3	104	4,044,414	4,753,598	+709.184 + 17.53
\$50,000 but under \$100,000	4	292	20,508,447	22,566,530	+2,058,083+10.04
\$100,000 but under \$200,000	5	301	43,149,229	47,428,929	+4,279,700 $+9.92$
\$200,000 but under \$300,000	6	139	34,312,576	36,195,401	+1.882.825 $+5.49$
\$300,000 but under \$400,000	7	79	26,747,400	25,892,465	-854,935 -3.20
\$400,000 but under \$500,000	s i	52	22,675,073	25,325,861	+2,650,788+11.69
\$500,000 but under \$1,000,000	9	92	62,580,578	67,347,331	+4,760,753 +7.62
\$1,000,000 but under \$2,000,000	10	37	48,635,505	49,234,102	+598,597 +1.23
\$2,000,000 and over	11	16	46,699,373	49,189,337	+2,489,964 +5.33
TOTALS,		1,155	\$309,950,003	\$328,835,685	+\$18,885,682 +6.09

Class one shows, for 34 establishments, an increase in the value of goods made of 63.27 per cent in 1889 as compared

with 1887. Class two comprises 9 establishments and the increase is 26.88 per cent. Class three, 104 establishments, the increase in product being 17.53 per cent. Class four, 292 establishments, the increase shown being 10.04 per cent. class five are 301 establishments which show an increase in the value of product of 9.92 per cent. Class six has 139 establishments, and an increase of product, in 1889 over 1887, of 5.49 per cent. Class seven, 79 establishments, shows a loss in 1889 as compared with 1887 of 3.20 per cent. Class eight, 52 establishments, shows an increase in product value of 11.69 per cent; class nine, comprising 92 establishments, an increase of 7.62 per cent; class ten, 37 establishments, an increase of 1.23 per cent; and class eleven, 16 establishments, shows an increase in value of product of 5.33 per cent. The 1.155 establishments compared in all classes, present a total value of goods made in 1887 of \$309,950,003, and in 1889 of \$328,835,685. showing an increase of \$18,885,682, or 6.09 per cent. This average increase is exceeded in all classes except the sixth, seventh, tenth, and eleventh.

	Industries.	Number of Estab- lishments Considered	VALUE OF GOODS MADE	
			1887	1888
1	Boots and shoes,	213	\$43,163,103	\$44,720,693
2	Carpetings,	4	4,464,529	4,406,446
$\frac{2}{3}$	Carriages and wagons,	13	1,190,709	1,428,402
4	Clothing,	38	11,560,840	11,913,910
5	Cotton goods,	129	72,668,689	77,807,716
6	Food preparations,	55	17,281,631	19,648,967
7	Furniture,	38	4,453,385	4,401,988
8	Hosiery and knit goods,	9	3,535,851	3,225,730
9	Leather,	66	11,691,014	10,686,107
10	Machines and machinery,	65	11,141,798	11,470,272
11	Metals and metallic goods,	93	12,315,686	12,376,087
12	Mixed textiles,	10	2,288,751	1,942,521
13	Paper and paper goods, *	51	12,915,035	14,131,492
14	Print works, dye works, and			
	bleacheries,	15	16,288,884	14,123,860
15	Rubber and elastic goods,	17	8,698,300	8,797,007
1 6	Silk and silk goods,	6	3,863,066	3,840,005
17	Woollen goods,	71	23,419,640	23,384,084
18	Worsted goods,	15	6,488,352	6,595,215
19	Other industries,	167	32,152,760	35,284,992
20	ALL INDUSTRIES,	1,075	\$299,582,023	\$310,185,494

Comparative Product. Increase and Decrease — 1887, 1888, 1889.

The recapitulation on pages 42 and 43 is comparative, and brings together, by industries, from the detailed presentation on pages 3 to 39, the value of goods made in 1,075 identical establishments which returned the value of product for each of the three years, 1887, 1888, and 1889. It will, obviously, be impossible for us to review each of the industries presented in this recapitulation, so we shall confine our analytical treatment to certain leading industries, which are thoroughly representative in this and all other presentations to be considered. Below we bring forward the figures for 908 establishments. contained within the 18 leading industries, which show the relative increase or decrease in the value of goods made in 1888 as compared with 1887, and in 1889 as compared with 1888, with equivalent percentages. The value of goods made, in 1889, in these selected industries, was \$281,825,425, or 88.66 per cent of the total value of goods made in all the industries considered.

VALUE OF GOODS MADE	INCREASE (+), OR I	DECREASE (-), IN-		of Increase or se in —	
1889	as compared with 1887	as compared with 1888	1888 as compared with 1887	as compared with	
\$45,574,650 4,752,760 1,173,174 11,632,868 80,811,278 18,742,064 4,303,591 2,738,013	+\$1,557,590 -58,080 +237,693 +353,070 +5,139,027 +2,367,336 -51,397 -310,121	+\$873,957 $+346,314$ $-255,228$ $-281,042$ $+3,003,562$ $-906,903$ $-98,397$ $-487,717$	$\begin{array}{c c} +3.61 \\ -1.30 \\ +19.96 \\ +3.05 \\ +7.07 \\ +13.70 \\ -1.15 \\ -8.77 \end{array}$	$ \begin{array}{r} +1.91 \\ +7.86 \\ -17.87 \\ -2.36 \\ +3.86 \\ -4.62 \\ -2.24 \\ -15.12 \end{array} $	1 2 3 4 5 6 7 8
9,903,717 13,051,480 13,348,840 1,782,280 14,643,568	$\begin{array}{c c} -1,004,907 \\ +328,474 \\ +60,401 \\ -346,230 \\ +1,216,457 \end{array}$	-782,390 $+1,581,208$ $+972,753$ $-160,241$ $+512,076$	$ \begin{array}{r} -8.60 \\ +2.95 \\ +0.49 \\ -15.13 \\ +9.42 \end{array} $	$ \begin{array}{r} -7.32 \\ +13.79 \\ +7.86 \\ -8.25 \\ +3.62 \end{array} $	9 10 11 12 13
14,455,476 9,705,700 4,288,297 23,954,108 6,963,561 36,049,526	$\begin{array}{c} -2,165,024 \\ +98,707 \\ -23,061 \\ -35,556 \\ +106,863 \\ +3,132,229 \end{array}$	$\begin{array}{r} +331,616 \\ +908,693 \\ +448,292 \\ +570,024 \\ +368,346 \\ +744,534 \end{array}$	$\begin{array}{r} -13.29 \\ +1.13 \\ -0.60 \\ -0.15 \\ +1.65 \\ +9.74 \end{array}$	$ \begin{array}{r} +2.35 \\ +10.33 \\ +11.67 \\ +2.44 \\ +5.59 \\ +2.11 \end{array} $	14 15 16 17 18 19
\$317,874,951	+\$10,603,471	+\$7,689,457	+3.54	+2.48	20

It should be understood by the reader that each presentation in this volume is to be considered by itself. Each one represents a certain number of the same establishments under conditions entirely different from those obtaining in other presentations, and should not be confounded one with another. Thus, for instance, while the recapitulation for the first table presented the results for 3,494 establishments, the one now under consideration deals with but 1,075 establishments, and other recapitulations will vary in like manner, so far as establishments are concerned; but, notwithstanding the variations in the number of establishments, the figures in each recapitulation represent the "same" establishments in so far as they have made returns for the years under consideration; that is to say, the 1,075 establishments here considered are also included in the recapitulation covering 3,494 establishments, and will be represented in other analysis tables so far as the returns made by them are susceptible of comparison with previous This one feature alone, of comparing the value of the product of the "same" establishments in each year, and in the same way, by years for the same establishments, for the different industrial features, renders these returns most valuable as indicating the actual trend of business from year to year, and it could not be as fully shown in any other way.

Referring to the analysis table on pages 144 and 145, we find an increase in the value of goods made for All Industries of 2.48 per cent in 1889 as compared with 1888. This annual or yearly increase may fairly be considered a normal one for the State as a whole, though a number of industries show an increase larger than the increase for all the industries, notably Machines and Machinery, 13.79 per cent; Silk and Silk Goods, 11.67 per cent; and Rubber and Elastic Goods, 10.33 per cent. The industries which show an increase less than that for all the industries, as noted in the analysis table, are Boots and Shoes, 1.91 per cent; Print Works, Dye Works, and Bleacheries, 2.35 per cent; and Woollen Goods, 2.44 per cent.

The industries reporting a decrease in the value of goods made in 1889 as compared with 1888, as shown in the recapitulation on pages 42 and 43, are as follows: Agricultural Implements, 3.04 per cent; Arms and Ammunition, 6.21 per

cent; Buttons and Dress Trimmings, 6.31 per cent; Carriages and Wagons, 17.87 per cent; Chemical Preparations (Compounded), 14.91 per cent; Clothing, 2.36 per cent; Cooking, Lighting, and Heating Apparatus, 32.20 per cent; Cotton, Woollen, and Other Textiles, 8.82 per cent; Flax, Hemp, and Jute Goods, 2.86 per cent; Food Preparations, 4.62 per cent; Furniture, 2.24 per cent; Hose: Rubber, Linen, etc., 16.73 per cent; Hosiery and Knit Goods, 15.12 per cent; Leather, 7.32 per cent; Linen, 8.35 per cent; Liquors: Malt, Distilled, and Fermented, 9.50 per cent; Lumber, 37.32 per cent; Mixed Textiles, 8.25 per cent; Oils and Illuminating Fluids, 2.94 per cent; Stone, 3.79 per cent; Straw and Palm Leaf Goods, 10.85 per cent; and Wooden Goods, 3.38 per cent.

To indicate further the fluctuations in the value of product, and the variations of increase and decrease in the different years, we append a table of 18 leading industries which shows the percentages of increase or decrease in the value of goods made in 1888 as compared with 1887, in 1889 as compared with 1888, and in 1889 as compared with 1887.

_	Number of Estab-	Percentages of Increase (+), or Decrease (-), in -				
Industries.	lishments Considered	1888 as compared with 1887	1889 as compared with 1888	1889 as compared with 1887		
Boots and shoes,	213 4 13 38 129 55 38 9 66 65 93 10 51 15 17 6 71 15 167	$\begin{array}{c} +3.61 \\ -1.30 \\ +19.96 \\ +3.05 \\ +7.07 \\ +13.70 \\ -1.15 \\ -8.77 \\ -8.60 \\ +2.95 \\ +0.49 \\ -15.13 \\ +9.42 \\ -13.29 \\ +1.13 \\ -0.60 \\ -0.15 \\ +1.65 \\ +9.74 \\ \end{array}$	$\begin{array}{c} +1.91\\ +7.86\\ -17.87\\ -2.36\\ +3.86\\ -4.62\\ -2.24\\ -15.12\\ -7.32\\ +7.86\\ -8.25\\ +3.62\\ +10.33\\ +11.67\\ +2.44\\ +5.59\\ +2.11\\ \end{array}$	$\begin{array}{c} +5.59 \\ +6.46 \\ -1.47 \\ +0.62 \\ +11.21 \\ +8.45 \\ -3.36 \\ -22.56 \\ -15.29 \\ +17.14 \\ +8.39 \\ -22.13 \\ +13.38 \\ -11.26 \\ +11.58 \\ +11.01 \\ +2.28 \\ +7.32 \\ +12.12 \end{array}$		
ALL INDUSTRIES,	1,075	+3.54	+2.48	+6.11		

The variations in the percentages of increase or decrease in the value of goods made, as shown in the three yearly comparisons for 18 leading industries, are noted in the foregoing table. Boots and Shoes, comparing 1888 with 1887, shows an increase of 3.61 per cent; an increase in 1889 as compared with 1888 of 1.91 per cent; and an increase in 1889 as compared with 1887 of 5.59 per cent. Carpetings shows a decrease of 1.30 per cent in 1888 as compared with 1887, an increase of 7.86 per cent in 1889 as compared with 1888, but a smaller percentage of increase (6.46) in 1889 as compared with 1887. Carriages and Wagons shows an increase of 19.96 per cent in product value in 1888 as compared with 1887, and a decrease of 1.47 per cent when comparing 1889 with 1887. crease of 8.77 per cent in the hosiery and knit goods industry is noted in 1888 as compared with 1887, and the percentage of decrease is more marked when 1889 is compared with 1887, being 22.56 per cent. The increase in the value of goods made of 0.49 per cent, in the metal and metallic goods industry, in 1888 as compared with 1887, reaches 8.39 per cent when 1889 is compared with 1887. Silk and Silk Goods shows a decrease of 0.60 per cent in 1888 as compared with 1887, but an increase of 11.01 per cent when 1889 is compared with The percentage of increase between 1888 and 1887, and 1889 and 1888, is about normal, that is, nearly three per cent annually.

Comparative Product. Five Years: 1885-1889.

The presentation upon pages 44 to 49 is instructive as showing the movement of business in certain establishments. The value of goods made is shown for the same establishments, in each industry, for each of the five years, 1885, 1886, 1887, 1888, and 1889; the whole number of establishments considered, in all the industries, being 895. The table permits of comparisons being made, as regards the value of product, between any two years of the five years, and while the comparsions, in the body of the work, are made only for 1886 with 1885, 1887 with 1886, 1888 with 1887, and 1889 with 1888, the material is there for a series of very interesting comparisons by industries. The first analysis table reproduces the showing for All Industries and is as follows:

	Yı	EARS.		Number of Estab- lishments Considered	Value of Goods Made	Increase (+), or Decrease (-), as Compared with Previous Year	Percentages
1885,				895	\$210,341,207	_	_
1886,				895	239,719,121	+\$29,377,914	+13.97
1887,				895	253,109,311	+13,390,190	+5.59
1888,				895	260,722,265	+7,612,954	+3.01
1889,				895	268,132,964	+7,410,699	+2.84

The value of goods made in 1885, as reported by the 895 establishments, was \$210,341,207; the increase, for the same establishments, for the year 1886, was \$29,377,914, or 13.97 per cent. The increase between 1886 and 1887 was \$13,390,-190, or 5.59 per cent. The increase between 1887 and 1888 was \$7,612,954, or 3.01 per cent, and that between 1888 and 1889 was \$7,410,699, or 2.84 per cent.

The increase in the value of goods made is shown more fully in the following analysis table for All Industries:

CLASSIFICATION.				Increase (+), or Decrease (-), in Value of Goods Made	Percentages
1886 as compared with 1885, 1887 as compared with 1885, 1888 as compared with 1885, 1889 as compared with 1885,		:		+\$29,377,914 $+42,768,104$ $+50,381,058$ $+57,791,757$	$ \begin{array}{r} +13.97 \\ +20.33 \\ +23.95 \\ +27.48 \end{array} $
1887 as compared with 1886, 1888 as compared with 1886, 1889 as compared with 1886,	•	:	:	$\begin{array}{c} +13,390,190 \\ +21,003,144 \\ +28,413,843 \end{array}$	+5.59 $+8.76$ $+11.85$
1888 as compared with 1887, 1889 as compared with 1887,	•	·		+7,612,954 +15,023,653	$^{+3.01}_{+5.94}$
1889 as compared with 1888,			•	+7,410,6 99	+2.84

From this table we can accurately trace the progression made by the 895 establishments considered, and we are of the opinion that these establishments, which represented, in 1889, \$268,132,964 worth of goods made, can be considered as decidedly indicative. They are the largest establishments in the industries which they represent, and the steady progress made, and the percentages of increase shown, bear out our previously recorded statements that the manufacturing

industries of the Commonwealth are not only holding their own but are increasing at a uniform rate. We have mentioned on a previous page that the normal rate of increase was about three per cent. According to the Census of 1885, the actual net percentage of increase in the value of goods made in 1885 over 1875, was 27.56 per cent, or 2.756 per cent annually. The year 1885 was considered a "bad" year for manufacturers, and the fact is indicated by the above table which shows an increase for 895 establishments of 13.97 per cent in the value of product in 1886, 20.33 per cent in 1887, 23.95 per cent in 1888, and 27.48 per cent in 1889, all in comparison with 1885. increase here shown exceeds the normal rate of increase spoken of from the fact that the year 1885 did not represent the natural production of the State. When we examine the figures as shown in comparison with 1886, we note that the rate of increase continues to range in the near vicinity of three per cent, for, in comparing 1888 with 1886 the increase is 8.76 per cent, and in comparing 1889 with 1886 it is found to be 11.85 per cent, that is, an increase of about three per cent each year. The same rate of progression is seen when we compare 1888 and 1889 with 1887, the percentages of increase being 3.01 and 5.94, respectively. The increase in 1889 as compared with 1888 was 2.84 per cent.

We bring forward the figures for the "Metal" industries in the following table: — $\,$

	YE	CARS.		Number of Estab- lishments Considered	Value of Goods Made	Inerease (+), or Decrease (-), as Compared with Previous Year	Percentages
1885,				160	\$19,546,260	_	_
1886,				160	23,587,354	+\$4,041,094	+20.67
1887,				160	24,996,899	+1,409,545	+5.98
1888,				160	$25,\!243,\!385$	+246,486	+0.99
1889,				160	27,608,167	+2,364,782	+9.37
						,	

These figures represent the value of goods made in 160 establishments making return for each of the five years, and includes the industries designated as Agricultural Implements, Arms and Ammunition, Artisans' Tools, Machines and Machinery, and Metals and Metallic Goods. We have not included

Carriages and Wagons, as so much of the work done in this industry calls for the use of wood, leather, and other materials besides metals. The increase in 1886 above 1885 is 20.67 per cent, this increase falling to 5.98 per cent when comparing 1887 with 1886, and a further drop to 0.99 per cent is shown when comparing 1888 with 1887. The comparison of 1889 with 1888, however, shows an increase of 9.37 per cent, indicating a better condition than that prevailing in 1887 and 1888.

We reproduce for the "Metal" industries the same kind of an analysis table as shown for All Industries.

Classification.			Increase (+) or Decrease (-)	Percentages
1886 as compared with 1885, 1887 as compared with 1885, 1888 as compared with 1885, 1889 as compared with 1885,		:	+\$4,041,094 $+5,450,639$ $-5,697,125$ $+8,061,907$	$\begin{array}{c} +20.67 \\ +27.89 \\ +29.15 \\ +41.25 \end{array}$
1887 as compared with 1886, 1888 as compared with 1886, 1889 as compared with 1886,	:	:	$\begin{array}{c} +1,409,545 \\ +1,656,031 \\ +4,020,813 \end{array}$	+5.98 $+7.02$ $+17.05$
1888 as compared with 1887, 1889 as compared with 1887,		:	+246,486 $+2,611,268$	+0.99 $+10.45$
1889 as compared with 1888,			+2,364,782	+9.37

The salient point brought out here is the variations in the percentages of increase. The normal rate which is applicable to All Industries would not, of course, apply to individual industries, as fluctuations would naturally be more marked in a single industry than in all the industries combined. This table further emphasizes the fact that 1885 was a poor year. The increase in 1886 was 20.67 per cent; in 1887, 27.89 per cent; in 1888, 29.15 per cent; and in 1889, 41.25 per cent, all in comparison with 1885. Comparing 1886 with the succeeding years we note that the increase in 1887 was 5.98 per cent; in 1888, 7.02 per cent; and, in 1889, 17.05 per cent. The small increase of 0.99 per cent in 1888 as compared with 1887 rose to 10.45 per cent in 1889, and in comparing 1889 with 1888 we find that the increase is 9.37 per cent.

The analysis table, which follows, is for the "Textile" industries:

	YE	ARS.		Number of Estab- lishments Considered	Value of Goods Made	Increase (+), or Decrease (-), as Compared with Previous Year	Percentages
1885,				219	\$92,405,955	_ ;	_
1886.				219	104,245,046	+\$11,839,091	+12.81
1887,				219	112,180,334	+7,935,288	+7.61
1888,				219	117,085,570	+4,905,236	+4.37
1889,				219	121,609,894	-4,524,324	+3.86

We have included in the "Textile" group the following industries: Carpetings, Cordage and Twine, Cotton Goods, Cotton, Woollen, and Other Textiles, Flax, Hemp, and Jute Goods, Hosiery and Knit Goods, Linen, Mixed Textiles, Silk and Silk Goods, Woollen Goods, and Worsted Goods. Our classification of "Textiles" therefore should be understood as including all industries using a spun fibre. We have not included Print Works, Dye Works, and Bleacheries, for the reason that it is impracticable to separate those establishments which print, dye, or bleach for others, from those which manufacture yarn or cloth and then subject it to processes in their own establishments.

The 219 establishments in this group show a product value of \$92,405,955 in 1885, which increased in 1886 to \$104,245,046, or 12.81 per cent; in 1887 to \$112,180,334, or 7.61 per cent; in 1888 to \$117,085,570, or 4.37 per cent; and in 1889 to \$121,609,894, or 3.86 per cent.

Bringing forward for "Textiles" the comparisons for the several years we secure the following:

CLASSIFICATION.				Increase (+) or Decrease (-)	Percentages
1886 as compared with 1885, 1887 as compared with 1885, 1888 as compared with 1885, 1889 as compared with 1885,	:			+\$11,839,091 +19,774,379 +24,679,615 +29,203,939	+12.81 $+21.40$ $+26.71$ $+31.60$
1887 as compared with 1886, 1888 as compared with 1886, 1889 as compared with 1886,	:	:		+7,935,288 $+12,840,524$ $+17,364,848$	$\begin{array}{r} +7.61 \\ +12.32 \\ +16.66 \end{array}$
1888 as compared with 1887, 1889 as compared with 1887,	•	•		+4,905,236 +9,429,560	+4.37 $+8.41$
1889 as compared with 1888,	•		•	+4,524,324	+3.86

Here again the steady increase from 1885 is brought into prominence by the percentages of gain shown in the years 1886 to 1889, inclusive. They are as follows: in 1886, 12.81 per cent; 1887, 21.40 per cent; 1888, 26.71 per cent; and 1889, 31.60 per cent. The increase of 7.61 per cent in value of goods made in 1887 as compared with 1886 rises to 12.32 per cent in 1888 and to 16.66 per cent in 1889. When comparisons are made between 1888 and 1887 the increase is shown to be 4.37 per cent, rising to 8.41 per cent in 1889. The comparison of 1889 with 1888 shows an increase slightly above the normal rate for All Industries, or 3.86 per cent.

We have called attention in our reviews of the preceding tables to the cumulative evidence which supports the assertion that the year 1885 was to all intents and purposes a thoroughly "bad" year for the manufacturing industries of the Commonwealth. This has been conceded by financiers, by representative commercial agencies, and by the press of the country, and while it has never gone much beyond a "statement" it has been generally accepted as a fact. Without the aid which the Annual Statistics of Manufactures supplies, this statement would not have been susceptible of proof, and the settlement of this question decisively, as is here done by comparative statistics, amply justifies their preparation.

Conclusions respecting the condition of any industry, which might be perfectly justifiable if based upon the Census of 1885 alone, may in some cases be modified in the light of the evidence here afforded. At any rate the comparisons herein annually presented should be given due weight whenever it is proposed to draw deductions from the results of the Census. Another fact which these reports have been able to accentuate, if not to establish, is the normal rate of increase in production from year to year.

The table which follows shows, for the 35 industries now under consideration, the relative amounts of increase or decrease in the value of goods made, with equivalent percentages, for each of the four years, 1886, 1887, 1888, and 1889.

Value of Goods Made. Comparisons — 1885–1889.

Industries, etc.	Number of Estab- lishments Considered	Increase (+), or Decrease (-), in the Value of Goods Made	Percentages
Agricultural Implements.			
1886 as compared with 1885,	4	+\$77,571	+8.51
1887 as compared with 1885,	4	+154,434	+16.94
1888 as compared with 1885,	4	-198,019	+21.73
1889 as compared with 1885,	4	+164,322	+18.03
Arms and Ammunition.			
1886 as compared with 1885,	8	+\$48,543	+3.92
1887 as compared with 1885,	$\tilde{8}$	-202,455	+16.36
1888 as compared with 1885,	8	+72,094	+5.83
1889 as compared with 1885,	8	-9,163	-0.74
Artisans' Tools.			
1886 as compared with 1885,	6	+\$42,053	+6.77
1887 as compared with 1885,	6	+84,813	+13.65
1888 as compared with 1885,	6	+145,912	+23.48
1889 as compared with 1885,	6	+207,665	+33.41
Boots and Shoes.			
1886 as compared with 1885,	172	+\$4,164,440	+12.55
1887 as compared with 1885,	172	+4,146,371	+12.50
1888 as compared with 1885,	172	+5,719,995	+17.24
1889 as compared with 1885,	172	+6,599,105	+19.89
Boxes (Paper and Wooden).			
1886 as compared with 1885,	11	+\$110,264	+15.40
1887 as compared with 1885,	11	+99,579	+13.90
1888 as compared with 1885,	11	+128,136	+17.89
1889 as compared with 1885,	11	+135,100	
Carpetings.			
1886 as compared with 1885,	2	+\$495,821	+21.38
1887 as compared with 1885,	$\frac{2}{2}$	+691,315	+29.81
1888 as compared with 1885,	$\frac{2}{2}$	+580,979 +767,847	$\begin{vmatrix} +29.81 \\ -25.05 \\ +33.11 \end{vmatrix}$
1865 as compared with 1865,	2	7107,041	₹33.11
Carriages and Wagons.			
1886 as compared with 1885,	10	+\$22,735	+3.22
1887 as compared with 1885,	10	+75,981	+10.76
1888 as compared with 1885,	10	+95,191 +15,721	+13.48 $+2.23$
1000 as compared with 1000,	10		12.20
Chemical Preparations (Compounded).			
1886 as compared with 1885,	2 2	+\$21,888	+29.26
1887 as compared with 1885,	$\frac{2}{2}$	+18,906	+25.27
1888 as compared with 1885,	$\frac{2}{2}$	+13,914 +683	+18.60 +0.91
Clocks and Watches. 1886 as compared with 1885,	2	+\$119,368	+35.85
1887 as compared with 1885,	2	+173,995	+52.25
1888 as compared with 1885,	2	-124,666	+37.44
1889 as compared with 1885,	2	+157,956	+47.43
	<u> </u>	1	l

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Value of Goods Made. Comparisons — 1885-1889 — Continued.

Industries, etc.		Number of Estab- lishments Considered	Increase (+), or Decrease (-), in the Value of Goods Made	Percentages
Clothing.				
1886 as compared with 1885,		27	+\$1,036,904	+17.73
1887 as compared with 1885,		27	+\$1,036,904 +1,627,647 +1,961,980	07 00
1888 as compared with 1885,		27	+1,961,980	$\begin{bmatrix} +27.85 \\ -33.54 \end{bmatrix}$
1889 as compared with 1885,	•	27	+2,198,285	+37.58
Cordage and Twine.				
ů.		7	+\$508,945	1-20 58
1886 as compared with 1885, 1887 as compared with 1885,	•	7	+668,670	+20.58 $+27.04$
1888 as compared with 1885,	:	7	+1,487,516	+60.16
1889 as compared with 1885,		7	+1,676,736	+67.82
			, , ,	
$Cotton\ Goods.$				
1886 as compared with 1885,	•	107	+\$7,065,161	+13.01
1887 as compared with 1885,	•	107	+12,324,746 $+16,701,229$	$\begin{array}{c} -22.69 \\ -30.75 \end{array}$
1888 as compared with 1885, 1889 as compared with 1885,	•	107 107	19,754,734	$\frac{1}{4}36.37$
1005 as compared with 1005,	•	10.	10,101,101	100.01
Cotton, Woollen, and Other Textiles.				
1886 as compared with 1885,		2	\$245,355	-7.25
1887 as compared with 1885,	•	2	-352,247	-10.41
1888 as compared with 1885,	•	2 2	-126,740	-3.74 -12.23
1889 as compared with 1885,	•	2	-414,091	-12.20
Flax, Hemp, and Jute Goods.				
1886 as compared with 1885,		3	+\$26,361	+2.28 $+1.77$
1887 as compared with 1885,		3	+55,030	+1.77
1888 as compared with 1885,	٠	3	+279,798	+24.23 $+20.67$
1889 as compared with 1885,	•	3	+238,736	+20.67
Food Preparations.				
1886 as compared with 1885,		49	+\$495,934	+5.14
1887 as compared with 1885,		49	+1,533,340	+15.91 $+31.48$
1888 as compared with 1885,		49	+3,034,447	
1889 as compared with 1885,	•	49	+2,755,222	+28.58
Furniture.				
1886 as compared with 1885,		34	-\$246,818	-6.47
1887 as compared with 1885,		34	+349,639	10 10
1888 as compared with 1885,		34	+307,947	+8.07
1889 as compared with 1885,		34	+233,550	+6.12
Glass.				
1886 as compared with 1885,		3	-\$12,926	-1.06
1887 as compared with 1885,		3	+18,717	+5.87
1888 as compared with 1885,		3	2,152	-0.68
1889 as compared with 1885,		3	+67,848	+21.29
Hosicry and Knit Goods.				
1886 as compared with 1885,		6	+\$869,264	+61.10
1887 as compared with 1885,		6	+1,448,526	± 101.82
1888 as compared with 1885,		6	+870,573	+61.20
1889 as compared with 1885,		6	+517,970	+36.41
		·		

Value of Goods Made. Comparisons -- 1885-1889 -- Continued.

INDUSTRIES, ETC.	Number of Estab- lishments Considered	Increase (+), or Decrease (-), in the Value of Goods Made	Percentages
Leather.			
1886 as compared with 1885,	55	+\$198,568	+2.03
1887 as compared with 1885,	55	-136,281	1 00
1888 as compared with 1885,	55	-1,097,447	-1.39 -11.21
1889 as compared with 1885,	55	-1,875,049	-19.16
Linen.			
1886 as compared with 1885,	3	+\$159,822	+14.96
1887 as compared with 1885,	3	+230,664	+21.59
1888 as compared with 1885,	3	+231,462	-21.66
1889 as compared with 1885,	3	+122,957	+11.51
Liquors: Malt, Distilled, and Fermented.			
1886 as compared with 1885,	17	+\$20,164	+0.61
1887 as compared with 1885,	17	-289,615	-8.82
1888 as compared with 1885,	17	+405,630	+12.35
1889 as compared with 1885,	17	+38,466	+1.17
Machines and Machinery.			
1886 as compared with 1885,	55	+\$2,402,084	+35.21
1887 as compared with 1885,	55	+3,095,868	+45.38
1888 as compared with 1885,	55	+3,378,737	+49.52
1889 as compared with 1885,	55	+4,894,185	+71.73
Metals and Metallic Goods.		•	
1886 as compared with 1885,	87	+\$1,470,843	+14.78
1887 as compared with 1885,	87	+1,913,069	+19.22
1888 as compared with 1885,	87	+1,902,363	+19.11
1889 as compared with 1885,	87		+28.18
Mixed Textiles.			
1886 as compared with 1885,	9	+\$211,109	+11.02
1887 as compared with 1885,	9 9	+324,848	+16.96
1888 as compared with 1885,	9	-26,089 +468,573	-1.36 +24.46
1000 as compared with 1000,		7400,010	7-21.10
Musical Instruments and Materials.		1 *** 00 ** 00	
1886 as compared with 1885,	14	+\$186,188	+7.56 + 15.14
1887 as compared with 1885,	14 14	+372,638	17 66
1888 as compared with 1885,	14	$\begin{array}{c} +434,887 \\ +751,070 \end{array}$	+17.66 $+30.51$
		1 102,010	100.01
Paper and Paper Goods.		1.500-1.05-1	10.70
1886 as compared with 1885,	46	+\$681,275	+6.19
1887 as compared with 1885,	46 46	+786,881	+7.15 $+16.71$
1889 as compared with 1885,	46	$\begin{array}{c c} +1,840,304 \\ +2,039,739 \end{array}$	$\frac{10.71}{18.53}$
Print Works, Dye Works, and Bleacheries.			
1886 as compared with 1885,	13	185 328 845	+63.91
1887 as compared with 1885,	13	+\$5,338,845 +6,590,840	+78.90
1888 as compared with 1885,	13	+5.474.732	+65.54
1889 as compared with 1885,	13	+5,800,219	-69.44
	l		•

Value of Goods Made. Comparisons — 1885-1889 — Concluded.

Rubber and Elastic Goods. 1886 as compared with 1885, 13 +1,547,997 1887 as compared with 1885, 13 +1,547,997 1889 as compared with 1885, 13 +1,112,111			
1886 as compared with 1885,	INDUSTRIES, ETC.	mber of stab- stab- ments in the Value of Goods Made	Percentages
1886 as compared with 1885,	Publica and Flastic Condo		
1886 as compared with 1885,	6 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} +31.37 \\ +49.19 \\ +30.18 \\ +35.34 \end{array}$
1886 as compared with 1885,	Silk and Silk Goods		
1886 as compared with 1885,	6 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{r} +17.51 \\ -30.90 \\ -30.11 \\ +45.30 \end{array}$
1887 as compared with 1885,	Stone.		İ
1886 as compared with 1885,	7 as compared with 1885, 8 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{r} -7.42 \\ +13.94 \\ +14.61 \\ +10.26 \end{array}$
1886 as compared with 1885,	Straw and Palm Leaf Goods.		
1886 as compared with 1885,	6 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{r} +26.30 \\ +30.92 \\ +25.88 \\ +10.66 \end{array}$
1886 as compared with 1885,	Tullow Condles Com and Come		
1886 as compared with 1885,	6 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c c} -4.44 \\ -8.57 \\ -0.39 \\ +11.60 \end{array} $
1887 as compared with 1885,	Wooden Goods.		
1886 as compared with 1885,	6 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+3.71 $+14.91$ $+0.72$ -7.89
1886 as compared with 1885,	Woollen Goods		
1886 as compared with 1885,	3 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} +9.25 \\ +16.79 \\ +18.14 \\ +22.47 \end{array} $
1886 as compared with 1885,	Worsted Goods.		
	3 as compared with 1885,	$\begin{array}{c c} 12 & +716,913 \\ 12 & +816,368 \end{array}$	+14.30 -14.34 -16.33 $+22.97$
	ALL INDUSTRIES		
1886 as compared with 1885, 895 +\$29,377,914 1887 as compared with 1885, 895 +42,768,104 1888 as compared with 1885, 895 +50,381,058 1889 as compared with 1885, 895 +57,791,757	3 as compared with 1885,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} +13.97 \\ +20.33 \\ +23.95 \\ +27.48 \end{vmatrix}$

We divide this table into four classes, as follows: first, the industries showing a percentage of increase greater than that for All Industries, those showing a percentage of increase less than that shown for all industries, and also the industries showing a decrease in value of product in 1886 as compared with 1885. The second, third, and fourth classes bring out the same facts separately for each of the years 1887, 1888, and 1889.

The increase in 1886 over 1885 in All Industries was 13.97 per cent. The industries showing an increase greater than that shown for all industries are as follows: Boxes (Paper and Wooden), 15.40 per cent; Carpetings, 21.38 per cent; Chemical Preparations (Compounded), 29.26 per cent; Clocks and Watches, 35.85 per cent; Clothing, 17.73 per cent; Cordage and Twine, 20.58 per cent; Hosiery and Knit Goods, 61.10 per cent; Linen, 14.96 per cent; Machines and Machinery, 35.21 per cent; Metals and Metallic Goods, 14.78 per cent; Print Works, Dye Works, and Bleacheries, 63.91 per cent; Rubber and Elastic Goods, 31.37 per cent; Silk and Silk Goods, 17.51 per cent; Straw and Palm Leaf Goods, 26.30 per cent; and Worsted Goods, 14.30 per cent. The industries which show a percentage of increase less than that shown for All Industries are: Agricultural Implements, 8.51 per cent; Arms and Ammunition, 3.92 per cent; Artisans' Tools, 6.77 per cent; Boots and Shoes, 12.55 per cent; Carriages and Wagons, 3.22 per cent; Cotton Goods, 13.01 per cent; Flax, Hemp, and Jute Goods, 2.28 per cent; Food Preparations, 5.14 per cent; Leather, 2.03 per cent; Liquors: Malt, Distilled, and Fermented, 0.61 per cent; Mixed Textiles, 11.02 per cent; Musical Instruments and Materials, 7.56 per cent; Paper and Paper Goods, 6.19 per cent; Wooden Goods, 3.71 per cent; and Woollen Goods, 9.25 per cent. The industries in this class, which show a decrease in the value of goods made in 1886 as compared with 1885, are: Cotton, Woollen and Other Textiles, 7.25 per cent; Furniture, 6.47 per cent; Glass, 4.06 per cent; Stone, 7.42 per cent; and Tallow, Candles, Soap, and Grease, 4.44 per cent.

In the second class, the increase in All Industries in 1887 as compared with 1885, was 20.33 per cent. The industries showing a percentage of increase greater than that shown

for All Industries are as follows: Carpetings, 29.81 per cent: Chemical Preparations (Compounded), 25.27 per cent; Clocks and Watches, 52.25 per cent; Clothing, 27.83 per cent; Cordage and Twine, 27.04 per cent; Cotton Goods, 22.69 per cent; Hosiery and Knit Goods, 101.82 per cent; Linen, 21.59 per cent; Machines and Machinery, 45.38 per cent: Print Works, Dye Works, and Bleacheries, 78.90 per cent; Rubber and Elastic Goods, 49.19 per cent; Silk and Silk Goods, 30.90 per cent; and Straw and Palm Leaf Goods, 30.92 per cent. The industries showing a percentage of increase less than that shown for All Industries are: Agricultural Implements, 16.94 per cent; Arms and Ammunition, 16.36 per cent; Artisans' Tools, 13 65 per cent; Boots and Shoes, 12.50 per cent; Boxes (Paper and Wooden), 13.90 per cent; Carriages and Wagons, 10.76 per cent; Flax, Hemp, and Jute Goods, 4.77 per cent: Food Preparations, 15.91 per cent; Furniture, 9.16 per cent; Glass, 5.87 per cent; Metals and Metallic Goods, 19.22 per cent; Mixed Textiles, 16.96 per cent; Musical Instruments and Materials, 15.14 per cent; Paper and Paper Goods, 7.15 per cent; Stone, 13.94 per cent; Wooden Goods, 14.91 per cent: Woollen Goods, 16.79 per cent; and Worsted Goods, 14.34 per cent. The industries in this class which show a decrease in the value of goods made in 1887 as compared with 1885, are as follows: Cotton, Woollen, and Other Textiles. 10.41 per cent; Leather, 1.39 per cent; Liquors: Malt, Distilled, and Fermented, 8.82 per cent; and Tallow, Candles. Soap, and Grease, 8.57 per cent.

The third class comprises the comparison of 1888 with 1885, the increase in All Industries, in 1888, being 23.95 per cent. The industries which exhibit a percentage of increase greater than that shown for All Industries are the following: Carpetings, 25.05 per cent; Clocks and Watches, 37.44 per cent; Clothing, 33.54 per cent; Cordage and Twine, 60.16 per cent; Cotton Goods, 39.75 per cent; Flax, Hemp, and Jute Goods, 24.23 per cent; Food Preparations, 31.48 per cent; Hosiery and Knit Goods, 61.20 per cent; Machines and Machinery, 49.52 per cent; Print Works, Dye Works, and Bleacheries, 65.54 per cent; Rubber and Elastic Goods, 30.18 per cent; Silk and Silk Goods, 30.11 per cent; and Straw and Palm Leaf Goods, 25.88 per cent. The industries which

show a percentage of increase less than that shown for All Industries, follow: Agricultural Implements, 21.73 per cent; Arms and Ammunition, 5.83 per cent; Artisans' Tools, 23.48 per cent; Boots and Shoes, 17.24 per cent; Boxes (Paper and Wooden), 17.89 per cent; Carriages and Wagons, 13.48 per cent; Chemical Preparations (Compounded), 18.60 per cent; Furniture, 8.07 per cent; Linen, 21.66 per cent; Liquors: Malt, Distilled, and Fermented, 12.35 per cent; Metals and Metallic Goods, 19.11 per cent; Musical Instruments and Materials, 17.66 per cent; Paper and Paper Goods, 16.71 per cent; Stone, 14.61 per cent; Wooden Goods, 0.72 per cent; Woollen Goods, 18.14 per cent; and Worsted Goods, 16.33 per cent. The following industries show a decrease in the value of goods made in 1888 as compared with 1885: Cotton, Woollen, and Other Textiles, 3.74 per cent; Glass, 0.68 per cent; Leather, 11.21 per cent; Mixed Textiles, 1.36 per cent; and Tallow, Candles, Soap, and Grease, 0.39 per cent.

The fourth and last class places in comparison the year 1889 with 1885; the increase in All Industries, in 1889, was 27.48 per cent. The following industries show a percentage of increase greater than that shown for All Industries: Artisans' Tools, 33.41 per cent; Carpetings, 33.11 per cent; Clocks and Watches, 47.43 per cent; Clothing, 37.58 per cent; Cordage and Twine, 67.82 per cent; Cotton Goods, 36.37 per cent; Food Preparations, 28.58 per cent; Hosiery and Knit Goods, 36.41 per cent; Machines and Machinery, 71.73 per cent; Metals and Metallic Goods, 28.18 per cent; Musical Instruments and Materials, 30.51 per cent; Print Works, Dye Works, and Bleacheries, 69.44 per cent; Rubber and Elastic Goods, 35.34 per cent; and Silk and Silk Goods, 45.30 per cent.

The industries in which the percentage of increase is less than in All Industries follow: Agricultural Implements, 18.03 per cent; Boots and Shoes, 19.89 per cent; Boxes (Paper and Wooden), 18.86 per cent; Carriages and Wagons, 2.23 per cent; Chemical Preparations (Compounded), 0.91 per cent; Flax, Hemp, and Jute Goods, 20.67 per cent; Furniture, 6.12 per cent; Glass, 21.29 per cent; Linen, 11.51 per cent; Liquors: Malt, Distilled, and Fermented, 1.17 per cent; Mixed Textiles, 24.46 per cent; Paper and Paper Goods, 18.53 per

cent; Stone, 10.26 per cent; Straw and Palm Leaf Goods, 10.66 per cent; Tallow, Candles, Soap, and Grease, 11.60 per cent; Woollen Goods, 22.47 per cent; and Worsted Goods, 22.97 per cent. A decrease in the value of goods made in 1889 as compared with 1885 is shown in the following industries: Arms and Ammunition, 0.74 per cent; Cotton, Woollen, and Other Textiles, 12.23 per cent; Leather, 19.16 per cent; and Wooden Goods, 7.89 per cent.

The increase in All Industries in 1886 over 1885 was, as we have seen, 13.97 per cent. In three industries, the percentage of increase fell below the normal rate for All Industries, that is, three per cent; they were Flax, Hemp, and Jute Goods, Leather, and Liquors: Malt, Distilled, and Fermented. In five industries, a decrease in the value of goods made was shown in 1886 as compared with 1885. The largest percentage of increase in any industry since 1885 was 101.82. This is shown in Hosiery and Knit Goods in comparing 1887 with 1885. The lowest percentage of increase in any one year (0.61) was in Liquors: Malt, Distilled, and Fermented, for 1886 as compared with 1885. The highest percentage of decrease (19.16) is found in Leather, in 1889 as compared with 1885, and the lowest percentage of decrease (0.39) is in Tallow, Candles, Soap, and Grease, in 1888 as compared with 1885.

We next present, by industries, a graphic table which shows the increase (+), or decrease (-), in the value of goods made in 1886, 1887, 1888, and 1889, in comparison with 1885, for the 895 establishments just considered.

Industries.	as compared with 1885	1887 as com- pared with 1885	1888 as com- pared with 1885	1889 as com- pared with 1885	
Agricultural implements,		+	+	+	+
Arms and ammunition,		+	+	1 +	
Artisans' tools,		+	+	+	+
Boots and shoes,		+	+	+	+
Boxes (paper and wooden), .		+	+	+	+
Carpetings,		+	<u> </u>	1	+
Carriages and wagons,		+	+	+	1
Chemical preparations (compounded),	+	+	+	+

Industries.	1886 as com- pared with 1885	1887 as com- pared with 1885	1888 as com- pared with 1885	1889 as com- pared with 1885
Clocks and watches,	+	+	+	+
Clothing,	+	+	+,	+
Cordage and twine,	+	+	+	+
Cotton goods,	+	+	+	+
Cotton, woollen, and other textiles, .		_	_	
Flax, hemp, and jute goods,	+	+	+	+
Food preparations,	+	+	l . +	+
Furniture,	-	+	+	+
Glass,	 	+	_	+
Hosiery and knit goods,	+	+	+	+
Leather,	+	_	_	_
Linen,	+	+	+	+
Liquors: malt, distilled, and fer-				
mented,	+	_	+	+
Machines and machinery,	+	+	+	+
Metals and metallic goods,	+	+	+	+
Mixed textiles,	++	+	-	+
Musical instruments and materials, .	+	+	+	+
Paper and paper goods,	+	+	+	+
Print works, dye works, and bleach-				
eries,	+	+	+	+
Rubber and elastic goods,	+	+	+	+
Silk and silk goods,	+	+	+	+
Stone,		+	+	+
Straw and palm leaf goods,	+	+	+	++
Tallow, candles, soap, and grease, .	_	_		+
Wooden goods,	+	+	+	
Woollen goods,	+	+	+	+
Worsted goods,	+	+	+	+
All Industries,	+	+	+	+

With the exception of nine industries, increases are shown in each year. Arms and Ammunition shows an increase in 1886, 1887, and 1888, and a decrease in 1889. Cotton, Woollen, and Other Textiles shows a decrease in value of product each year. In Furniture, a decrease is shown in 1886 only; in Glass, a decrease in 1886 and 1888 while the other years show an increase. Leather shows an increase in 1886 only; Liquors: Malt, Distilled, and Fermented, a decrease in 1887,

but an increase in the other years. In Mixed Textiles a decrease is shown for 1888 only; Stone, a decrease for 1886 only; Tallow, Candles, Soap, and Grease did not recover from the effects of 1885 until 1889, the first increase being shown in that year. A decrease is shown for Wooden Goods in 1889.

The next analysis table brings forward, from the recapitulation on page 49, a showing for 18 leading industries, and includes returns from those establishments which reported the value of product for each of the five years 1885 to 1889 inclusive, the whole number of establishments considered, in all industries, being 895. The relative increase or decrease in the value of goods made is based upon the figures for the two years 1885 and 1889 only.

Industries.	Number of Estab-	VALUE OF C	loods Made	Increase (+),	Percent-
INDUSTRIES.	lishments Con- sidered	1885	1889	Decrease (-), in 1889	ages
Boots and shoes,	172	\$33,173,491	\$39,772,596	+\$6,599,105	+19.89
Carpetings,	2	2,319,009	3,086,856	+767,847	+33.11
Carriages and wagons,	10	705,953	721,674	+15,721	+2.23
Clothing,	27	5,849,372	8,047,657	+2,198,285	+37.58
Cotton goods,	107	54,316,241	74,070,975	+19,754,734	+36.37
Food preparations,	49	9,640,323	12,395,545	+2,755,222	+28.58
Furniture,	34	3,817,041	4,050,591	+233,550	+6.12
Hosiery and knit goods,	6	1,422,600	1,940,570	+517,970	+36.41
Leather,	55	9,788,403	7,913,354	-1,875,049	-19.16
Machines and machinery,	55	6,822,596	11,716,781	+4,894,185	+71.73
Metals and metallic goods,	87	9,953,533	12,758,431	+2,804,898	+28.18
Mixed textiles,	9	1,915,706	2,384,279	+468,573	+24.46
Paper and paper goods,	46	11,010,073	13,049,812	+2,039,739	+18.53
Print works, dye works, and					
bleacheries,	13	8,353,128	14,153,347	+5,800,219	+69.44
Rubber and elastic goods,	13	3,146,717	4,258,828	+1,112,111	+35.34
Silk and silk goods,	6	2,951,253	4,288,297	+1,337,044	+45.30
Woollen goods,	62	16,400,949	20,086,019	+3,685,070	+22.47
Worsted goods,	12	4,999,510	6,147,873	+1,148,363	+22.97
Other industries,	130	23,755,309	27,289,479	+3,534,170	+14.88
ALL INDUSTRIES,	895	\$210,341,207	\$268,132,964	+\$57,791,757	+27.48

Taking each of the industries in order, we note first that Boots and Shoes, with 172 establishments, returns a product value of \$33,173,491 in 1885 and \$39,772,596 in 1889, an increase of \$6,599,105, or 19.89 per cent. The establishments included in the industry called Carpetings number two; they show a product, in 1885, of \$2,319,009 which was increased \$767,847 between the years 1885 and 1889, making a total of \$3,086,856, or a gain of 33.11 per cent. In the carriage and wagon industry, ten establishments are included with a value of goods made in 1885 of \$705,953 and in 1889 of \$721,674, an increase of \$15,721, or 2.23 per cent. Comparing the 27 establishments in the clothing industry, we find that \$5,849,372 was reported as the value of goods made in 1885 and \$8,047,657 in 1889, an increase of \$2,198,285, or 37.58 per cent. The 107 establishments which are classified under the head of Cotton Goods show a steady and encouraging increase; the product value in 1885 of \$54,316,241 rose to \$74,070,975 in 1889, an increase of \$19,754,734, or 36.37 per cent. Food Preparations, 49 establishments, exhibits a value of goods made in 1885 of \$9,640,323 and in 1889 of \$12,395,545, thus showing an increase of \$2,755,222, or 28.58 per cent.

Despite the competition which has affected the furniture industry, the 34 establishments considered in this comparison show an improvement in 1889 as against 1885, the gain being \$233,550, or 6.12 per cent. This is all the more encouraging as it has been supposed that the industry was fast falling into a Hosiery and Knit Goods, with six establishments represented, exhibits an increase of \$517,970, or 36.41 per cent, when comparing 1889 with 1885. The leather industry has been losing ground for several years past, but the difficulties are rapidly disappearing under a better condition of affairs, and while the 55 establishments here represented display a decrease in the value of goods made in 1889 as against 1885 of \$1,875,049, or 19.16 per cent, it is believed that the decrease is but temporary. Machines and Machinery is strong industrially, the returns of work done, made by the 55 establishments considered, may be accepted as typical of the other establishments not represented. The value of goods made in 1885 was \$6,822,596 and, in 1889, \$11,716,781, being an increase of \$4,894,185, or 71.73 per cent. The 87 establishments included under Metals and Metallic Goods show an increase in 1889 as compared with 1885, of 28.18 per cent, the value of goods made in the latter year being \$9,953,533 and in the former year \$12,758,431. In Mixed Textiles, nine establishments are represented; these, in 1885, had a product value of \$1,915,706 which rose in 1889 to \$2,384,279, an increase of \$468,573, or 24.46 per cent.

The paper and paper goods industry gives evidence of increasing prosperity if we accept the 46 establishments considered as being typical of the industry as a whole. The value of product in 1885 was \$11,010,073 and in 1889, \$13,049,812. an increase of \$2,039,739, or 18.53 per cent. The 13 establishments which are classified under the head of Print Works. Dve Works, and Bleacheries, exhibited in 1885 a value of product of \$8,353,128, which rose in 1889 to \$14,153,347, an increase of \$5,800,219, or 69.44 per cent. The rubber and elastic goods industry has 13 establishments represented, with a product value of \$3,146,717 in 1885; the value of their output in 1889 was \$4,258,828, an increase of \$1,112,111, or 35.34 per cent. The silk and silk goods industry, six establishments, reported the value of goods made in 1885 as \$2,951,253 and in 1889 as \$4,288,297; this was an increase of \$1,337,044, or 45.30 per cent.

Comparing the 62 establishments in Woollen Goods, we find that with a product value in 1885 of \$16,400,949, an increase in the value of goods made was shown in 1889 of \$3,685,070, or 22.47 per cent, the aggregate for these same establishments in the latter year being \$20,086,019. In Worsted Goods there are 12 establishments which made returns during the five years, and we find in comparing 1889 with 1885 that the increase in the value of goods made rose from \$4,999,510 to \$6,147,873, an increase of \$1,148,363, or 22.97 per cent. The 130 establishments which are considered in the general line of Other Industries, exhibited a product value in 1885 of \$23,755,309, which rose to \$27,289,479 in 1889, an increase of \$3,534,170, or 14.88 per cent. As previously stated, this presentation relates to 895 identical establishments making comparative returns for each of the five years 1885 to 1889, inclusive. The aggregate value of goods made in 1885 was \$210,341,207 and, in 1889, \$268,132,964, a net increase, in four years, of \$57,791,757, or 27.48 per cent.

This five year table is followed by another, pages 50 and 51, also by industries, in which comparisons are made between the same establishments returning value of product

for the years 1885 and 1889. This presentation shows those establishments, in each industry, which made a return of value of product in 1885 and in 1889, the whole number of establishments, in all the industries, being 2,780; the table is more comprehensive than the one previously given, as it includes all those establishments which made return of value of product for the two years 1885 and 1889, regardless of the fact as to whether or not they made returns for the intermediate years. We present an analysis table of 18 leading industries, which shows the relative amount of increase or decrease in the value of goods made in 1889 as compared with 1885, with equivalent percentages.

Industries.	Number of Estab-	VALUE OF (GOODS MADE	Increase (+),	Percent-
	lishments Con- sidered	1885	1889	Decrease (—), in 1889	ages
Boots and shoes,	. 423	\$63,723,104	\$72,976,414	+\$9,253,310	+14.52
Carpetings,	. 10	5,382,959	6,662,552	+1,279,593	+23.77
Carriages and wagons,	. 63	2,893,593	3,128,940	+235,347	+8.13
Clothing,	. 104	15,982,492	20,696,083	+4,713,591	+29.49
Cotton goods,	. 141	62,431,778	85,039,334	+22,607,556	+36.21
Food preparations,	. 222	48,037,376	51,318,219	+3,280,843	+6.83
Furniture,	. 115	7,267,552	7,953,945	+686,393	+9.44
Hosiery and knit goods, .	. 17	2,134,579	3,653,588	+1,519,009	+71.16
Leather,	. 136	17,165,518	16,692,353	-473,165	-2.76
Machines and machinery, .	. 158	13,333,361	23,194,744	+9,861,383	+73.96
Metals and metallic goods, .	. 262	24,949,830	31,471,223	+6,521,393	+26.14
Mixed textiles,	. 13	2,214,684	2,819,872	+605,188	+27.33
Paper and paper goods,	. 84	16,966,699	20,347,857	+3,381,158	+19.93
Print works, dye works, and	ı				
bleacheries,	. 19	9,802,678	14,895,532	+5,092,854	+51.95
Rubber and elastic goods, .	. 23	9,126,385	15,189,835	+6,063,450	+66.44
Silk and silk goods,	. 7	3,135,253	4,536,297	+1,401,044	+44.69
Woollen goods,	108	25,136,120	29,345,740	+4,209,620	+16.75
Worsted goods,	. 14	7,358,085	10,155,800	+2,797,715	+38.02
Other industries,	. 861	63,720,594	79,067,918	+15,347,324	+24.09
ALL INDUSTRIES, .	2,780	\$400,762,640	\$499,146,246	+\$98,383,606	+24.55

The features of this table cannot be made any stronger by a text analysis. They are apparent. The idea that Massachusetts industries as a whole are losing ground from the effect of outside competition does not seem to gain any encouragement from this and the previous analysis tables. The number of establishments in this presentation is much larger than in the other, the excess being 67.81 per cent. We will simply call attention

to the line All Industries which shows, for the 2,780 establishments considered, that the value of goods made in 1885 was \$400,762,640, and in 1889, \$499,146,246. This is an increase in the latter over the former year of \$98,383,606, or 24.55 per cent.

The distinctive features of this table are best brought out by a comparison with the one just preceding, and for this purpose we bring together, from the two tables, the number of establishments, and the percentages of increase or decrease in the value of goods made in 1889 as compared with 1885, the analysis presentations of which are given on pages 163 and 166, ante, and which are based upon the recapitulation on page 49 and the extended industry showing on pages 50 and 51.

Industries.	Number of Estab- lishments Considered	Percentages of Increase (+), or Decrease (-), in 1889 as compared with 1885	Number of Estab- lishments Considered	Percentages of Increase (+), or Decrease (-), in 1889 as compared with 1885
Boots and shoes,	 172 10 27 107 49 34 6 55 55 87 9 46 13 13 6 62 12 130	$\begin{array}{c} +19.89 \\ +33.11 \\ +2.23 \\ +37.58 \\ +36.37 \\ +28.58 \\ +6.12 \\ +36.41 \\ -19.16 \\ +71.73 \\ +28.18 \\ +24.46 \\ +18.53 \\ +69.44 \\ +35.34 \\ +45.30 \\ +22.47 \\ +22.97 \\ +14.88 \\ \end{array}$	423 10 63 104 141 222 115 17 136 158 262 13 84 19 23 7 108 14 861	$\begin{array}{c} +14.52 \\ +23.77 \\ +8.13 \\ +29.49 \\ +36.21 \\ +6.83 \\ +9.44 \\ +71.16 \\ -2.76 \\ +73.96 \\ +26.14 \\ +27.33 \\ +19.93 \\ +51.95 \\ -66.44 \\ +44.69 \\ +16.75 \\ -38.02 \\ +24.09 \\ \end{array}$
ALL INDUSTRIES, .	895	+27.48	2,780	+24.55

For convenience, we shall designate the table, on page 49, showing 895 establishments, in 35 industries, as the "short" table and that on pages 50 and 51, showing 2,780 establishments, in 77 industries, as the "long" table. The 895 establishments constitute a part of the 2,780 establishments; that is the establishments shown in the short table are included

among the establishments in the long table. The only difference in the two presentations, as before mentioned, is that the 895 establishments have made return of the value of product for each of the years 1885 to 1889 inclusive, while the 2,780 establishments returned the value of product for each of the two years 1885 and 1889. They are presented in this comparison regardless of the fact as to whether or not they reported value of goods made for the intermediate years.

The first industry compared is Boots and Shoes. One comparison deals with 172 establishments and shows an increase in value of goods made of 19.89 per cent. The other treats of 423 establishments with an increase of but 14.52 per cent. The 172 establishments are, of course, included in the 423. It is safe to conclude from these figures that 14.52 per cent represents the increase in 1889 as compared with 1885. Two establishments are shown for Carpetings in the short table, and the percentage of increase in value of product is 33.11 against an increase of 23.77 per cent for ten establishments in the long table.

In the carriage and wagon industry, ten establishments are considered in the short table, with an increase in product value of 2.23 per cent as against 63 establishments in the long table, showing an increase of 8.13 per cent. A gain is shown in the long table, but a heavy loss was sustained by certain establishments in the fire at Amesbury a few years since, and the value of goods produced by them in 1889 did not aggregate as much as in 1885. What we mean is, that the establishments, since they have resumed business, have not turned out as great a value of product as they did before the fire, and consequently there is a loss in total value of product, and also a loss in the natural growth that would have taken place if the fire had not occurred. In the short table, 27 establishments are shown in the clothing industry with an increase in value of product of 37.58 per cent, and 104 establishments in the long table report an increase of 29.49 per cent. In Cotton Goods the variation is slight, 107 establishments showing an increase in value of goods made of 36.37 per cent and 141 establishments an increase of 36.21 per cent.

The variation in Food Preparations is more marked than in any other industry here considered. In the short table, 49 establishments report an increase in product value of 28.58 per

cent while in the long table 222 establishments report an increase of but 6.83 per cent. The reason for this falling off in percentage lies in the fact that establishments making a great variety of articles are classified under this industry head, and are affected by conditions such as are not found in any other industry. For instance, the catch of codfish might be poor; this would affect the packer of boneless fish. The vegetable crop might be destroyed from some cause; this would affect the packer of vegetables. The ice crop has been poor, and this affects the ice dealer. Many other causes render the returns for this industry more fluctuating as regards value of product than any other in our classification.

We find in Furniture a larger gain in the long table, where 115 establishments show an increase in value of goods made of 9.44 per cent as against an increase of 6.12 per cent reported by 34 establishments. In Hosiery and Knit Goods, 17 establishments show an increase in value of product of 71.16 per cent in the long table against an increase of 36.41 per cent shown by six establishments in the short table. The leather industry is the only one among the 18 that exhibits a decrease in value of goods made; it being 19.16 per cent for 55 establishments in the short table and 2.76 per cent for 136 establishments in the long table.

There is but a slight variation between the two sets of establishments in Machines and Machinery, 55 establishments showing an increase in product value of 71.73 per cent and 158 establishments an increase of 73.96 per cent. In Metals and Metallic Goods, 87 establishments report an increase in value of goods made of 28.18 per cent and 262 establishments an increase of 26.14 per cent. The nine establishments in Mixed Textiles report an increase in value of product of 24.46 per cent in the short table, and when the 13 establishments in the long table are considered, an increase of 27.33 per cent is seen. The difference between the two sets of establishments represented in Paper and Paper Goods amounts to but a fraction over one per cent, 46 establishments showing an increase in product value of 18.53 per cent and 84 establishments an increase of 19.93 per cent.

In Print Works, Dye Works, and Bleacheries, 13 establishments report an increase in value of product of 69.44

per cent and 19 establishments an increase of 51.95 per cent. There is a large margin in favor of the long table, in the rubber and elastic goods industry, 23 establishments showing an increase in value of goods made of 66.44 per cent against the increase of 35.34 per cent reported by 13 establishments in the short table. A smaller margin is shown in the long table for Silk and Silk Goods, seven establishments reporting an increase in value of product of 44.69 per cent, while in the short table six establishments show an increase of 45.30 per cent; the addition of one establishment in the long table being sufficient to reduce the percentage of increase.

The 62 establishments in the Woollen Goods industry, as shown in the short table, report an increase of 22.47 per cent in the value of goods made, while the 108 establishments in the long table show an increase of but 16.75 per cent. This is offset, in part, by the margin in favor of the long table when Worsted Goods is considered, 14 establishments displaying an increase of 38.02 per cent as against 22.97 per cent increase shown by 12 establishments.

As previously stated, the number of industries in the short table is 35 and the number in the long table 77. In the analysis table on page 167, 18 leading industries are represented, containing 765 establishments in the short table and 1,919 establishments in the long table; therefore it will be seen that the remainder of the 895 establishments and the 2,780 establishments represented in the line "other industries" are included in the other 17 industries of the short table and the other 59 industries of the long table, but to which we have not given separate consideration. The percentage of increase in these other industries considered as a whole is, in the short table, 14.88; but when the 59 industries in the long table are taken into consideration the increase reaches 24.09 per cent. examining the line All Industries we find that an increase in value of goods made of 27.48 per cent for 895 establishments is shown, against 24.55 per cent increase for 2,780 establishments; so that it will be seen when all the industries are considered it makes but very little difference whether we take, for purposes of comparison, the establishments of a larger calibre or the establishments in which, besides these, are included many of smaller productive capacity.

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

This presentation covers pages 54 to 57 and allows of comparisons between 1888 and 1889 for private firms and corporations, and for partners and stockholders.

PRIVATE FIRMS AND CORPORATIONS: BY INDUSTRIES.

There were 946 private firms and 418 corporations in the 47 industries considered in 1888, and 924 private firms and 440 corporations included in the table for 1889. The number in each industry is shown in the following table:

Industries.	PRIVAT	E FIRMS	Corpor	ATIONS
INDUSTRIES.	1888	1889	1888	1889
Agricultural implements,	_	-	5	5
Arms and ammunition,	7	7	3	3
Artisans' tools,	3	3	5	5
Artisans' tools,	280	275	11	16
Boxes (paper and wooden),	20	20	3	3
Burial cases, caskets, coffins, etc.,	1	1	-	_
Buttons and dress trimmings,	2	2	2	2
Carpetings,	1	1	4	4
Carpetings,	15	15	4	4
Chemical preparations (compounded), .	2	2	_	_
Clocks and watches,	-	-	2	2
Clothing,	41	40	6	7
Cooking, lighting, and heating apparatus,	-	-	2	2
Cordage and twine,	3	3	9	9
Cotton goods,	37	36	99	100
Cordage and twine,	1	1	1	1
Dyestuffs,	1	1		
Emery and sand paper and cloth, etc.,	-	_	2	2
Fertilizers	1	1	- 1	_
Flax, hemp, and jute goods,	2	2	1	1
Food preparations,	66	63	8	11
Furniture,	41	41	6	6
Glass,	1	1	4	4
Hose: rubber, linen, etc	_	-	1	1
Hosiery and knit goods,	6	5	5	6
Leather,	92	91	4	5
Linen,	1	1	$\begin{bmatrix} 2\\2 \end{bmatrix}$	$\frac{2}{2}$
Liquors: malt, distilled, and fermented, .	21	21	2	2
Lumber	1	1	_	_
Machines and machinery, Metals and metallic goods, Mixed textiles, Musical instruments and materials,	37	37	47	47
Metals and metallic goods,	74	73	48	49
Mixed textiles,	6	6	5	5
Musical instruments and materials,	13	12	10	11
Oils and illuminating fluids,	1	1	-	_

Industries.	PRIVAT	E FIRMS	Corpor	RATIONS
INVESTMES,	1888	1889	1888	1889
Paper and paper goods,	27	23	41	45
Print works, dye works, and bleacheries,	4	4	12	12
Railroad construction and equipment, .	1	1	_	_
Rubber and elastic goods,	9	9	11	11
Shipbuilding,	4	4	2	2
Silk and silk goods,	2	1	5	6
Stone,	13	13	6	6
Straw and palm leaf goods,	15	15	1	1
Fallow, candles, soap, and grease,	11	11	2	$\bar{2}$
Whips, lashes, and stocks,		_	1	1
Wooden goods	13	13	4	4
Woollen goods,	61	59	25	27
Worsted goods,	9	8	7	8
All Industries,	946	924	418	440

It will be seen from the preceding table that the private firm is represented in all of the industries, except the following:

Agricultural Implements.
Clocks and Watches.
Cooking, Lighting, and Heating
Apparatus.

Emery and Sand Paper and Cloth, etc. Hose: Rubber, Linen, etc.

Whips, Lashes, and Stocks.

Corporations are represented in all but seven of the industries, which are as follows:

Burial Cases, Caskets, Coffins, etc. Chemical Preparations (Compounded).

Fertilizers. Lumber.

Dyestuffs.

Oils and Illuminating Fluids. Railroad Construction and Equipment.

The table also shows that, in 1889, 22 of the private firms in existence in 1888 relinquished the partnership form of conducting business and for some reason adopted the corporate form. This change is noted in the following industries: Boots and Shoes, five; Paper and Paper Goods, four; Food Preparations, three; Woollen Goods, two; and Clothing, Cotton Goods, Hosiery and Knit Goods, Leather, Metals and Metallic Goods, Musical Instruments and Materials, Silk and Silk Goods, and Worsted Goods, one each.

In order to show, by percentages, the effect of this change from private firm to corporation the following table is given:

Clr.	A COLD	CATIO			Num	BER	PERCENTAGES		
	ASSIFI	CATIO	٠.			1888	1889	1888	1889
Private firms,					.	946	924	69.35	67.74
Corporations,	•	•	•	•	•	418	440	30.65	32.26
TOTALS,						1,364	1,364	100.00	100.00

In 1888 the private firms represented 69.35 per cent of all the establishments considered and the corporations 30.65 per cent. In 1889 the private firms represented 67.74 per cent of all the establishments and the corporations 32.26 per cent. The net decrease in private firms was 2.33 per cent and the net increase in corporations 5.26 per cent.

We bring forward in the next analysis table those industries in which the changes noted have taken place. It shows the number of private firms, the number of corporations, the number of partners, and the number of stockholders for 1888 and 1889, together with the increases or decreases, and equivalent percentages.

Indu	STRIES, 1	etc.		1888	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
$Bo\^ots$	and S	hoes.					
Private firms, . Corporations, . Partners, . Stockholders, .		•	:	280 11 536 172	275 16 512 264	-5 +5 -24 +92	-1.79 $+45.45$ -4.48 $+53.49$
C	lothing	<i>i</i> .					
Private firms, . Corporations, . Partners, . Stockholders, .			· ·	$egin{array}{c} 41 \\ 6 \\ 118 \\ 322 \\ \end{array}$	40 7 112 333	$-1 \\ +1 \\ -6 \\ +11$	$ \begin{array}{r} -2.44 \\ +16.67 \\ -5.08 \\ +3.42 \end{array} $
Cott	on God	ds.					
Private firms, . Corporations, . Partners, . Stockholders, .		:	:	37 99 70 5,206	$\begin{array}{c} 36\\100\\70\\16,203\end{array}$	$-1 \\ +1 \\ -7 \\ +997$	-2.70 $+1.01$ -6.56
Food P	repare	tions					
Private firms, . Corporations, . Partners, . Stockholders, .		:	:	66 8 126 94	63 11 117 172	-3 +3 -9 +78	-4.55 $+37.50$ -7.14 $+82.98$

## Hosiery and Knit Goods. Private firms,	Indu	STRIES	, ETC.			1888	1889	Increase (+), or Decrease (-), in 1889	Percent-
Private firms,	Hosiery a	ınd K	 Init Go	oods.					
Corporations	v					6	5	1	-16,67
Partners 17					Ċ				+20.00
Leather Private firms 92 91 -1 -1 -1 -1 -1 -1 -1	Partners								-35.29
Private firms,	Stockholders, .			•		1			+3.52
Corporations,			er.						
Partners 178						92	91		-1.09
Stockholders, 50 116 +66 +132 Metals and Metallic Goods. 74 73 —1 —1. Corporations, 48 49 +1 +2. Partners, 150 141 —9 —6. Stockholders, 1,225 1,331 +106 +8. Musical Instruments and Materials. Private firms, 13 12 —1 —7. Corporations, 10 11 +1 +106 +8. Musical Instruments and Materials. Private firms, 10 11 +1 +10 +8. Musical Instruments and Materials. 10 11 +1 +10 +8. Musical Instruments and Materials. 10 11 +1 +10 +8. Musical Instruments and Materials. 10 11 +1 +10 +1 +10 +1 +10 +1 +1 +10 +1 +1 +1 +1 +1 +1 +1 +1 +1 +1					•		5	+1	+25.00
Metals and Metallic Goods. 74 73 -1 -1 Private firms,		•	•	••	•				-2.25
Private firms,	Stockholders, .	•	•	•	•	50	116	+66	+132.00
Corporations,			allic G	foods.					
Partners, 150 141 -9 -6 Stockholders, 1,225 1,331 +106 +8 Musical Instruments and Materials. Private firms, 13 12 -1 -7 Corporations, 10 11 +1 +10 +10 +1 +1 +10 -7 -1 -1 -5 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1			•	•					-1.35
Partners,	T		•		•			+1	+2.08
Musical Instruments and Materials. 13 12 —1 —7. Corporations,					•			— 9	-6.00
Private firms, 13 12 -1 -7. Corporations, 10 11 +1 +10. Partners, 20 19 -1 -5. Stockholders, 147 153 +6 +4 Paper and Paper Goods. 27 23 -4 -14. Corporations, 41 45 +4 +9. Partners, 62 52 -10 -16. Stockholders, 922 912 +10 +1. Silk and Silk Goods. 2 1 -1 -50. Private firms, 2 1 -1 -50. Corporations, 5 6 +1 +1 Woollen Goods. 2 2 -3 -60. Private firms, 61 59 -2 -3 Corporations, 25 27 +2 +8 Partners, 107 96 -11 -10. Stockholders, 903 949 +46 +5 Worsted Goods. 7 8 +1	Stockholders, .	•	•	•	•	1,225	1,331	+106	+8.65
Corporations, . . 10 11 +1 +10 -5 5tockholders, . <t< td=""><td></td><td></td><td>and I</td><td>Materi</td><td>als.</td><td></td><td></td><td></td><td></td></t<>			and I	Materi	als.				
Stockholders,						13	12	— 1	-7.69
Stockholders,	Corporations, .					10	11	+1	+10.00
Paper and Paper Goods. Private firms,						20	19		-5.00
Private firms, 27 23 -4 -14 Corporations, 41 45 +4 +9 Partners, 62 52 -10 -16 -16 Stockholders, 922 912 +10 +1 Silk and Silk Goods. Private firms, 2 1 -1 -50 Corporations, 5 6 +1 +20 Partners, 5 2 -3 -60 Stockholders, 159 165 +6 +3 Woollen Goods. 25 27 +2 +3 Private firms, 25 27 +2 +8 Partners, 107 96 -11 -10 Stockholders, 903 949 +46 +5 Worsted Goods. 7 8 -1 -11 Private firms, 17 16 -1 -5 Stockholders, 162 164 +2 +1 ALL Industries. 946 924 -22 -2 -2	Stockholders, .	•	•			147	153	+6	+4.08
Private firms, 27 23 -4 -14 Corporations, 41 45 +4 +9 Partners, 62 52 -10 -16 -16 Stockholders, 922 912 +10 +1 Silk and Silk Goods. Private firms, 2 1 -1 -50 Corporations, 5 6 +1 +20 Partners, 5 2 -3 -60 Stockholders, 159 165 +6 +3 Woollen Goods. 25 27 +2 +3 Private firms, 107 96 -11 -10 +5 Worsted Goods. 903 949 +46 +5 Worsted Goods. 7 8 -1 -11 -10 Stockholders, 17 16 -1 -5 -5 Stockholders, 162 164 +2 +1 +1 All Industries. 162 164 -22 -2 -2 -2 -2 -2 <td>Paper an</td> <td>d Pap</td> <td>oer Go</td> <td>ods.</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Paper an	d Pap	oer Go	ods.					
Corporations,						97	93	_4	1.1 81
Partners, 62 52 -10 -16 Stockholders, 922 912 +10 +1 Silk and Silk Goods. -1 -10 +1 +1 Private firms, 2 1 -1 -50 +2 Corporations, 5 2 -3 -60 +2 -3 -60 +3 Woollen Goods. Woollen Goods. -2 -3 -60 +3 +6 +3 +2 -3 -60 +3 +6 +3 +2 -3 -60 +3 -60 +6 +3 +2 -3 -60 +3 -60 +3 -60 +3 -60 +3 -60 +3 -60 +3 -60 +4 -8 -8 -1 -11 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10 -11 -10 -10 -10 -10 -11 -10 -10 -11 -10 -10 -10 -11 -10 -10 -10				•	•	i .			
Stockholders,					•				-16.18
Private firms, .					·				+1.08
Corporations,	Silk an	d Sili	k Good	ls.					
Corporations,	Private firms, .					2	1	-1	-50.00
Partners,	Corporations, .						6	+1	+20.00
Woollen Goods. Private firms,						5	2	- 3	-60.00
Private firms,	Stockholders, .		•	•	•	159	165	+6	+3.77
Corporations,	Wool	len G	loods.						
Corporations,	Private firms					61	59	2	-3.28
Partners,									+8.00
Stockholders,									-10.28
Private firms,				,					+5.09
Corporations,	Wors	ted G	oods.						
Corporations,	Private firms, .					9	8	1	11.11
Partners,	Corporations, .								+14.29
Stockholders,	Partners, .							<u> -</u> î	-5.88
Private firms,								+2	+1.23
Private firms,	Атл. Т	NDUS	TRIES						
Corporations,						946	924	22	2. 33
7) 7					:				+5.26
	Partners, .					1,878	1,798	-80	-4.26
									+6.64

In Boots and Shoes, a decrease in private firms is noted of 1.79 per cent, and an increase in corporations of 45.45 per cent; the number of partners decreased 24, or 4.48 per cent. while the number of stockholders increased 92, or 53,49 per cent. The decrease in Clothing in private firms was 2.44 per cent, and in the number of partners six, or 5.08 per cent; the increase in corporations was 16.67 per cent and in stockholders 11, or 3.42 per cent. While there was a decrease of one private firm, or 2.70 per cent, in the cotton goods industry, there was no corresponding decrease in the number of partners, one or more establishments taking in an additional number to offset the loss occasioned by the change from a private firm to a corporation; the increase in the number of corporations was one, or 1.01 per cent, and in the number of stockholders 997, or 6.56 per cent. The change in Food Preparations affected three establishments, the private firms showing a loss of 4.55 per cent and the corporations a gain of 37.50 per cent; the number of partners affected was nine, or a decrease of 7.14 per cent, while the gain in stockholders was 78, or 82.98 per cent.

In Hosiery and Knit Goods, a change of one establishment is noted, reducing the private firms 16.67 per cent, and increasing the corporations 20 per cent; the loss in partners was six, or 35.29 per cent, and the gain in stockholders 24, or 3.52 per cent. One private firm became a corporation in 1889 in the leather industry; the decrease in private firms was 1.09 per cent and caused a consequent gain on the part of the corporations of 25 per cent; the number of partners decreased four, or 2.25 per cent, while the increase in stockholders amounted to 66, or a gain of 132 per cent. In Metals and Metallic Goods, 1.35 per cent represents the loss sustained by the private firms, and 2.08 per cent the gain secured by the corporations; the partners decreased nine, or six per cent, while the stockholders gained in number 106, or 8.65 per cent. One establishment changed from a private firm to a corporation in Musical Instruments and Materials, the loss in the first instance being 7.69 per cent, and the gain in the latter ten per cent; while a loss of only one partner, or five per cent, is noted, the gain in stockholders numbers six, or 4.08 per cent. In Paper and Paper Goods, four private firms, or 14.81 per cent, became corporations, the gain to the latter being 9.76 per cent; ten partners became ten stockholders, making the loss to partners

16.13 per cent and the gain to stockholders 1.08 per cent. The private firms in the silk and silk goods industry show a loss of 50 per cent, and the corporations a gain of 20 per cent; the partners show a decrease of three, or 60 per cent, and the stockholders a gain of six, or 3.77 per cent.

In Woollen Goods there is a loss of two, or 3.28 per cent, in private firms, and 11, or 10.28 per cent, in the number of partners; a gain of two, or eight per cent, in corporations, and 46, or 5.09 per cent, in the number of stockholders. In Worsted Goods a change of one is noted, the decrease to private firms being 11.11 per cent and the increase to corporations 14.29 per cent. In All Industries, 22 private firms became corporations; expressed in percentages, this indicates a loss of 2.33 per cent in private firms and again of 5.26 per cent in corporations; the loss in the number of partners was 80, or 4.26 per cent, and the gain in the number of stockholders was 1,635, or 6.64 per cent.

PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

The first analysis table under this sub-head shows, for 16 leading industries, the number of partners, designated as to sex, for 1888 and 1889.

			PART	NERS		
Industries.		1888			1889	
	Males	Females	Total	Males	Females	Total
Boots and shoes,	532	4	536	509	3	512
Carpetings,	1	-	1	1	-	1
Carriages and wagons,	31	-	31	31	-	31
Clothing,	118	-	118	112	-	112
Cotton goods,	62	8	70	62	8	70
Food preparations,	126	-	126	117	_	117
Furniture,	86	-	86	87	-	87
Hosiery and knit goods,	16	1	17	11	_	11
Leather,	178	-	178	174	-	174
Machines and machinery,	74	4	78	76	5	81
Metals and metallic goods,	146	4	150	138	3	141
Paper and paper goods,	62	-	62	52	-	52
Print works, dye works, and						
bleacheries,	7	_	7	7	_	7
Rubber and elastic goods,	18	-	18	17	-	17
Woollen goods,	107	-	107	96	_	96
Worsted goods,	17	-	17	16	-	16
Other industries,	270	6	276	266	7	273
ALL INDUSTRIES,	1,851	27	1,878	1,772	26	1,798

From the line All Industries we learn that, by comparing 1889 with 1888, there was a decrease of 80 partners, 79 males and one female. The largest decrease is seen in Boots and Shoes, the loss being 23 males and one female. Metals and Metallic Goods also shows a loss of one female partner, but, as an offset, a gain of one female partner is noted in Machines and Machinery. Cotton Goods, while exhibiting a change of one establishment from a private firm to a corporation, shows no variation in either male or female partners, some other establishment making a gain sufficient to overcome the loss occasioned by this change.

We now bring forward the totals for All Industries, in order to show the number of male partners, the number of female partners, and the number of estates, in 1888 and 1889, by numbers and percentages.

		Part:				Num	BER	Percentages		
			NERS.			1888	1889	1888	1889	
Males,						1,847	1,768	98.34	98.33	
Females,						27	26	1.44	1.45	
Estates,	•			•	•	$4 \mid$	4	0.22	0.22	
То	TALS,					1,878	1,798	100.00	100.00	

Briefly stated, this table shows that, in private firms, in 1888, the number of males represented 98.34 per cent of the total number of partners, the females, 1.44 per cent, and the estates 0.22 per cent. In 1889 the number of males represented 98.33 per cent of the total number of partners, the females 1.45 per cent, and the estates 0.22 per cent. The actual decrease in 1889 in males was 79, or 4.28 per cent, and in females one, or 3.70 per cent. The estates remained the same.

The table on pages 54 to 57, shows a number of industries in which special partners and estates appear, and in order that the proportion of each may be shown, the following table is presented exhibiting the number of general partners, the number of special partners, and the number of estates, for 1888 and 1889, with percentages:

Dinm	NERS.		Num	BER	PERCENTAGES			
	NERS.				1888	1889	1888	1889
General partners,					1,831	1,766	97.49	98.22
					43	28	2.29	1.56
Estates,			•		4	4	0.22	0.22
TOTALS, .					1,878	1,798	100.00	100.00

We note from this table that, in 1888, the general partners constituted 97.49 per cent of the total number of partners, the special partners 2.29 per cent, and the estates 0.22 per cent. In 1889 the general partners represented 98.22 per cent of the total number of partners, the special partners 1.56 per cent, and the estates, 0.22 per cent. Comparing 1889 with 1888, a loss is shown in the number of general partners of 65, or 3.55 per cent, in special partners of 15, or 34.88 per cent, while no change is shown for estates.

By reference to the head-notes on pages 54 to 57, it will be seen that there are duplications in the columns devoted to "Stockholders." These duplications are caused by the fact that the same body of stockholders is sometimes connected with two or more establishments, in the same or in different cities and towns, which, under the plan of classification adopted by this office, might come under two different industry heads; therefore it has been deemed expedient to credit the whole body of stockholders to each industry, but to count them once only when making up the total for All Industries. To illustrate: a corporation is engaged in manufacturing gray cotton cloth, a part of which is sold as gray cloth and the balance converted by bleaching, dyeing, or printing into another class of goods. This corporation has two establishments, a cotton mill and a print works. All accounts of stock used, persons employed, etc., are kept separately, and two schedules are returned to this office, one being classified under Cotton Goods and the other under Print Works, Dye Works, and Bleach-The stockholders number 50. They are counted in Cotton Goods, but if they are omitted from the tabulation of Print Works, Dye Works, and Bleacheries, that industry suffers in comparison as regards the number of stockholders; therefore, it has been decided to include the stockholders in both industries, but once only in the aggregate. The total number of duplications is shown in the following table:

-	1888	1889						
Males,							1,111	720
Females,							534	536
Banks, trustees, etc.,	•	•	•	•	٠		-	401
TOTALS, .							1,645	1,657

The second analysis table relates to stockholders, and presents, for 16 leading industries, the number of male and female stockholders and the number of banks, trustees, etc., holding certificates of stock, for the years 1888 and 1889.

	STOCKHOLDERS									
Industries.		18	888		1889					
INDUSTRIES,	Males	Fe- males	Banks, Trus- tees, etc.	Total	Males	Fe- males	Banks, Trus- tees, etc.	Total		
Boots and shoes,	126	46	_	172	211	50	3	264		
Carpetings,	559	310	-	869	401	308	156	865		
Carriages and wagons,	89	48	-	137	82	51	5	138		
Clothing,	209	113	-	322	207	113	13	333		
Cotton goods,	9,649	5,338	219	15,206	8,687	5,673	1,843	16,203		
Food preparations,	87	. 7	-	94	157	15	_	172		
Furniture,	223	92	_	315	246	92	-	338		
Hosiery and knit goods,	*462	*219	_	*681	*331	*226	*148	*705		
Leather,	34	16	_	50	45	16	55	116		
Machines and machinery,	707	266	-	973	657	251	102	1,010		
Metals and metallie goods, .	816	409	_	1,225	873	418	40	1,331		
Paper and paper goods,	621	301	-	922	574	289	49	912		
Print works, dye works, and										
bleacheries,	*766	*462	4	*1,232	*521	*426	*292	*1,239		
Rubber and elastic goods,	446	264	-	710	429	275	41	745		
Woollen goods,	*631	*272	_	*903	*513	*293	143	*949		
Worsted goods,	127	35	_	162	123	35	6	164		
Other industries,	*1,723	*552	11	*2,286	*1,613	*599	*210	*2,422		
ALL INDUSTRIES,	16,164	8,216	234	24,614	14,950	8,594	2,795	26,249		

The asterisk (*) indicates that a certain number of stock-holders are duplicated in the specified industries, as previously explained. From this table we learn that the total number of stockholders in 1888 was 24,614, of whom 16,164 were males, 8,216 females, and 234 were banks, trustees, etc. The total number of stockholders in 1889 was 26,249, of whom 14,950

were males, 8,594 females, and 2,705 banks, trustees, etc. The large increase shown in 1889, in the column devoted to banks, trustees, etc., may be explained on the ground that corporations in 1888 did not always make a special return of the number of the trustees, executors, or others holding stock for the benefit of individuals or estates, but included them in the column devoted to males, this being the practice ruling in the Census of 1885.

It is possible to show the effect of these stock-holding banks, trustees, etc., in the following table:

STOCKHOLDERS		Num	BER	PERCENTAGES		
STOCKHOLDERS			1888	1889	1888	1889
Males and females, .		•	24,380	23,544	99.05	89.69
Banks, trustees, etc., .	•		234	2,705	0.95	10.31
Totals,			24,614	26,249	100.00	100.00

In 1888, the males and females constituted 99.05 per cent of the total number of stockholders, and the banks, trustees, etc., 0.95 per cent. In 1889 the males and females formed 89.69 per cent of the total number of stockholders, and the banks, trustees, etc., 10.31 per cent. Between 1888 and 1889 a decrease is shown of 3.43 per cent in males and females, and an increase of 1,055.98 per cent in the number of banks, trustees, etc. This increase is so great and improbable that any comparison made would not be indicative; therefore, this year, for all purposes of comparison we shall include the banks, trustees, etc., with the males as was done in the report on the Statistics of Manufactures for 1888. In 1890, comparisons can be made on the basis of the new classification.

Including the banks, trustees, etc., with the males, we secure the following table:

	0-						Num	BER	PERCE	NTAGES
		госкн	OLDER	s. 			1888	1889	1888	1889
Males,							16,398	17,655 8,594	66.62 33.38	$67.26 \\ 32.74$
Females,	•	•	•	•	•	•	8,216			
Tor	rals,	•			•	•	24,614.	26,249	100.00	100.00

From this table we learn that in 1888 the males represented 66.62 per cent of the total number of stockholders and the females 33.38 per cent. In 1889 the males constituted 67.26 per cent of the total number of stockholders and the females 32.74 per cent. The increase in 1889 over 1888 in the number of males was 7.67 per cent and in females 4.60 per cent.

The next analysis table shows the total number of partners and the total number of stockholders in 1888 and 1889, with percentages.

Classification.					NUM	BER	PERCENTAGES		
	ASSIFI	CATIO.	··			1888	1889	1888	1889
Partners,						1,878	1,798	7.09	6.41
Stockholders,	•				•	24,614	26,249	92.91	93.59
TOTALS,						26,492	28,047	100.00	100.00

In 1888 the partners represented 7.09 per cent of the total number of partners and stockholders, and the stockholders 92.91 per cent. In 1889 the partners formed 6.41 per cent of the aggregate number of partners and stockholders, and the stockholders 93.59 per cent. The decrease in the number of partners in 1889 as compared with 1888, was 4.26 per cent, and the increase in stockholders in 1889 over the previous year was 6.64 per cent.

If we consolidate the males and females, as shown in the tables for partners and stockholders we secure, for purposes of comparison, the following table:

Pá	PARTNERS AND STOCKHOLDERS.					Num	BER	Percentages		
		A.D.)100H1				1888	1889	1888	1889
Males,							18,249	19,427	68.88	69.27
Females,	•				•	٠	8,243	8,620	31.12	30.78
To	TALS,						26,492	28,047	100.00	100.00

We have included the banks, trustees, estates, etc., with the males in this table, and note that in 1888 the males constituted

68.88 per cent of the total number of persons, both partners and stockholders, and the females 31.12 per cent. In 1889 the males formed 69.27 per cent of the total number of partners and stockholders and the females 30.73 per cent. The increase in 1889 over 1888 in the number of males was 6.46 per cent and in the number of females 4.57 per cent. The increase in the number of both males and females was 5.87 per cent.

The corporation affords for women a field of investment in industrial enterprises which, as appears from the comparative showings in this report, is occupied to a considerable extent. Whether these investments have been made directly by the women themselves, or whether the shares of stock now owned by them are the result of the investments of their husbands or other relatives is not known, but the very evident growth of female stockholders is a matter of importance. As illustrating the influence of women in manufacturing corporations, we show for Cotton Goods the respective number of male and female stockholders for 1888 and 1889, with percentages.

Stockholders.					Num	BER	Percentages		
STO	скног	DER.	s.			1888	1889	1888	1889
Males, .						9,649	8,687	63.46	53.61
Females, .						5,338	5,673	35.10	35.01
Banks, trustees,	etc.,					219	1,843	1.44	11.38
Totals,						15,206	16,203	100.00	100.00

Although the banks, trustees, etc., are shown in this table it is not our purpose to consider them at this time. In 1888 the females constituted 35.10 per cent of the total number of stockholders and, in 1889, 35.01 per cent; there was an increase in 1889 over 1888 of 335, or 6.28 per cent.

The figures for Metals and Metallic Goods show that in 1888 the females formed 33.39 per cent of the total number of stockholders and in 1889, 31.40 per cent. The actual increase in number of females between 1888 and 1889 was nine, or 2.20 per cent. The figures shown for the woollen goods industry bring out the fact that the females constituted 30.12 per cent of

the total number of stockholders in 1888 and 30.87 per cent in 1889. The actual increase in the number of females was 21, or 7.72 per cent.

In order to show the effect upon partners and stockholders by the change from private firms to corporations, we submit the following analysis table:

(In Leading Prov	Number		
CLASSIFICATION.		1888	1889
Private firms,		946 1,878 1.99	924 1,798 1.95
Corporations,		$\begin{array}{c} 418 \\ 24,614 \\ 58.89 \end{array}$	$\begin{array}{c} 440 \\ 26,249 \\ 59.66 \end{array}$

From this table it will be seen that the average number of partners to a private firm was 1.99 in 1888 and 1.95 in 1889. The average number of stockholders to a corporation in 1888 was 58.89, and in 1889, 59.66. For purposes of comparison we bring together these figures and those reported in Vol. II., of the Census of 1885, in the following table:

							NUMBER					
	CLA	SSIFICA	TION.				CENSUS	YEARS				
				1875	1885	1888	1889					
Private firms,							10,395	22,482	946	924		
Partners, .							15,733	28,294	1,878	1,798		
Average numb firm, .							1.51	1.26	1.99	1.95		
Corporations,							520	949	418	440		
Stockholders,							26,058	42,731	24,614	26,249		
Average num corporation,	oer.	of s	tockl	ıolde	rs to	\mathfrak{a}	50.11	45.03	58.89	59.60		

It will be seen from this table that the average number of partners to a private firm in 1875 was 1.51, and in 1885, 1.26. The average number of stockholders to a corporation in 1875 was 50.11 and in 1885, 45.03. These averages were based

upon the returns made by 10,395 private firms in 1875 and 22,482 private firms in 1885, and upon 520 corporations in 1875 and 949 corporations in 1885. The reader may compare for himself the figures for the later years, 1888 and 1889, which we have just reviewed.

In summarizing this portion of the analysis, we find that of the 1,364 establishments, in the 47 industries considered in 1889, 924, or 67.74 per cent, are private firms and 440, or 32.26 per cent, are corporations. These represent 28,047 persons, of whom 1,798, or 6.41 per cent, are partners and of whom 26,249, or 93.59 per cent, are stockholders. Of the partners, 98.33 per cent are males, 1.45 per cent are females, and 0.22 per cent are estates. Of the stockholders, 56.95 per cent are males, 32.74 per cent are females, and 10.31 per cent are banks, trustees, etc. The males form 59.61 per cent, the females 30.73 per cent, and the estates, banks, trustees, etc., 9.66 per cent of the whole number of persons carrying on business in the industries considered. We also find that the average number of partners to a private firm is 1.95 and the average number of stockholders to a corporation is 59.66.

GENERAL STATISTICS OF MANUFACTURES: BY INDUSTRIES.

The presentations on pages 60 to 63 show the number of establishments considered, the amount of capital invested, the value of stock used, the value of goods made, the average number of persons employed during the year, the smallest number of persons employed during the year, the greatest number of persons employed during the year, the total wages paid during the year, and the average yearly earnings in 47 industries for each of the two years 1888 and 1889. Separate comparisons are also made, between these two years, for capital invested and wages paid. We shall consider capital invested, stock used, goods made, and wages paid, in the following pages, and reserve our consideration of the average number of persons employed until later, when the figures will be reviewed in connection with those indicating the smallest and the greatest number of persons employed.

CAPITAL INVESTED: BY INDUSTRIES.

In the table on page 64 comparison is made between the amount of capital invested in each of the 47 industries, in 1889 as against 1888. The aggregate amount of capital invested in 1888 was \$303,168,753 and in 1889, \$298,805,163, a decrease in the latter year of \$4,363,590, or 1.44 per cent. The industries which show an increase in capital invested in 1889, over the previous year, are Agricultural Implements, 6.40 per cent; Boxes (Paper and Wooden), 6.02 per cent; Buttons and Dress Trimmings, 3.61 per cent; Carpetings, 9.28 per cent; Clocks and Watches, 6.92 per cent; Clothing, 1.59 per cent; Cooking, Lighting, and Heating Apparatus, 99.17 per cent; Cordage and Twine, 4.53 per cent; Emery and Sand Paper and Cloth, etc., 45.59 per cent; Flax, Hemp, and Jute Goods, 20.21 per cent; Food Preparations, 14.93 per cent; Glass, 4.04 per cent; Hosiery and Knit Goods, 2.29 per cent; Metals and Metallic Goods, 2.55 per cent; Mixed Textiles, 0.41 per cent; Paper and Paper Goods, 3.03 per cent; Print Works, Dye Works, and Bleacheries, 8.24 per cent; Shipbuilding, 9.81 per cent; Silk and Silk Goods, 0.41 per cent; Stone, 3.63 per cent; Wooden Goods, 3.82 per cent; and Worsted Goods, 3.17 per cent. The industry in which the largest increase of capital is noted is Cooking, Lighting, and Heating Apparatus, 99.17 per cent; the next highest is Emery and Sand Paper and Cloth, etc., 45.59 per cent: and the smallest is found in Mixed Textiles and in Silk and Silk Goods, each of which industries increased its capital 0.41 per cent.

The following industries show a decrease in capital invested:

Leather.

Linen.

Arms and Ammunition.
Artisans' Tools.
Boots and Shoes.
Burial Cases, Caskets, Coffins, etc.
Carriages and Wagons.
Chemical Preparations (Compounded).
Cotton Goods.
Cotton, Woollen, and Other Textiles.

Fertilizers.

Liquors: Malt, Distilled, and Fermented.
Lumber.
Machines and Machinery.
Musical Instruments and Materials.
Rubber and Elastic Goods.
Straw and Palm Leaf Goods.
Tallow, Candles, Soap, and Grease.
Whips, Lashes, and Stocks.

Woollen Goods.

The industry showing the largest decrease was Burial Cases, Caskets, Coffins, etc., the decrease being 37.46 per cent. The smallest decrease, 0.24 per cent, is found in Artisans' Tools. No change in the amount of capital invested is shown in Dyestuffs, Hose: Rubber, Linen, etc., Oils and Illuminating Fluids, or Railroad Construction and Equipment.

We would call attention to the following statement which is quoted from the report for 1888: "Increase in capital as shown in the tables simply means that more capital was devoted to production. It does not necessarily imply an investment of more money on the part of partners or stockholders. It may mean an expansion of credit. The converse of each of these statements, is, of course, equally true. This undoubtedly accounts for part of the fluctuation from year to year."

Another influence which continually affects the figures representing capital finds its source in the fluctuating prices of the articles of stock used. A manufacturer will naturally watch the market quotations which affect the price of his principal article of stock, with the view of purchasing raw material at the lowest figure. If this is done, as is frequently the case, a large amount of stock remains on hand at the close of the year. This would constitute a part of the capital invested, and, in proportion as it was used in the following year, the capital would decline.

An expansion of credit is not an evidence of distress, and, so far as this may affect the returns relating to capital, should not in general be so considered. Very often the condition of trade, the opportunity to purchase stock on a favorable market, or other reasons, may make the employment of credit capital, for a time, a wise business operation. The use of loan capital or the purchase of stock on credit, in advance of immediate need, is frequently an evidence of prosperity in the industry, although such loans or purchases represent debt.

The following analysis table brings into comparison for 18 leading industries the capital invested in 1888 and 1889, with the increase or decrease noted by amounts and percentages. The capital invested in these leading industries represents 88.30 per cent of the total amount of capital invested in all the industries in 1889.

Industries,	Number of Estab- lishments		INVESTED	Increase (+), or Decrease (-),	Percent-
	Con- sidered	1888	1889	in 1889	
Boots and shoes,	291	\$19,922,965	\$19,718,474	-\$204,491	-1.03
Carpetings,	5	6,370,460	6,961,595	+591,135	+9.28
Carriages and wagons,	19	1,750,728	1,681,387	-69,341	-3.96
Clothing,	47	6,820,227	6,928,375	+108,148	+1.59
Cotton goods,	136	103,154,838	99,835,838	-3,319,000	-3.22
Food preparations,	74	7,314,591	8,406,771	+1,092,180	+14.93
Furniture,	47	4,550,463	3,849,837	-700,626	-15.40
Hosiery and knit goods,	11	2,950,798	3,018,339	+67,541	+2.29
Leather,	96	7,451,528	6,707,767	-743,761	-9.98
Machines and machinery,	84	17,874,449	17,527,967	-346,482	-1.94
Metals and metallic goods,	122	17,969,546	18,427,331	+457,785	+2.55
Musical instruments and ma-					
terials,	23	4,165,932	4,091,311	-74,621	-1.79
Paper and paper goods,	68	16,316,204	16,810,259	+494,055	+3.03
Print works, dye works, and					
bleacheries,	16	9,912,395	10,729,250	+816,855	+8.24
Rubber and elastic goods,	20	11,136,953	9,739,403	-1,397,550	-12.55
Straw and palm leaf goods, .	16	1,312,454	1,300,508	-11,946	-0.91
Woollen goods,	86	24,848,267	23,134,159	-1,714,108	-6.90
Worsted goods,	16	4,827,893	4,980,822	+152,929	+3.17
Other industries,	187	34,518,062	34,955,770	+437,708	+1.27
ALL INDUSTRIES,	1,364	\$303,168,753	\$298,805,163	-\$4,363,590	-1.44

In 1888 the capital invested in the 291 establishments engaged in the manufacture of Boots and Shoes, was \$19,922,965, and in 1889 the same establishments returned capital to the amount of \$19,718,474; this was a decrease of \$204,491, or 1.03 per cent. In Carpetings the capital shown by the five establishments considered in 1888 was \$6,370,460; this rose in 1889 to \$6,961,595, an increase of \$591,135, or 9.28 per cent. In the manufacture of carriages and wagons, 19 establishments reported a capital invested of \$1,750,728 in 1888, which fell in 1889 to \$1,681,387, a decrease of \$69,341, or 3.96 per cent. The clothing industry, with 47 establishments, returned a capital of \$6,820,227 in 1888; an increase of \$108,148, or 1.59 per cent, was made in 1889, the aggregate in this year being \$6,928,375. In 1888 the capital invested in 136 establishments engaged in the manufacture of cotton goods was \$103,154,838, and in 1889 the same establishments returned a capital of \$99,835,838; this was a decrease in 1889 of \$3,319,000, or 3.22 per cent. In Food Preparations the capital shown by the 74 establishments considered in 1888 was \$7,314,591; in 1889 it rose to

\$8,406,771, an increase of \$1,092,180, or 14.93 per cent. The 47 establishments engaged in the manufacture of furniture reported a capital invested of \$4,550,463 in 1888, which fell, in 1889, to \$3,849,837, a decrease of \$700,626, or 15.40 per cent. Hosiery and Knit Goods, 11 establishments, shows an increase in capital invested in 1889 of \$67,541 or 2.29 per cent, the aggregates being \$2,950,798 and \$3,018,339 in 1888 and 1889 respectively.

In Leather we note a decrease in 1889 as compared with 1888 amounting to \$743,761, or 9.98 per cent; the aggregate amount of capital invested in 1888 was \$7,451,528 and in 1889, \$6,707,767. In the manufacture of machines and machinery, 84 establishments, a capital invested is returned of \$17,874,449 in 1888, and in 1889 the same establishments reported a capital of \$17,527,967; this was a decrease of \$346,482, or 1.94 per cent. In Metals and Metallic Goods, 122 establishments exhibit a capital of \$17,969,546 in 1888, and \$18,427,331 in 1889, an increase of \$457,785, or 2.55 per cent. A decrease of \$74,621, or 1.79 per cent, is shown in Musical Instruments and Materials; the aggregate being \$4,165,932 in 1888, and \$4,091,311 in 1889.

The paper and paper goods industry, with 68 establishments in comparison, shows an increase in capital of \$494,055 in 1889, the percentage of increase being 3.03 and the aggregates of capital being \$16,316,204 and \$16,810,259 in 1888 and 1889 respectively. In 1888, Print Works, Dye Works, and Bleacheries, 16 establishments, returned a capital invested of \$9,912,-395, which rose in 1889 to \$10,729,250; this was an increase of \$816,855, or 8.24 per cent. The 20 establishments engaged in the manufacture of rubber and elastic goods reported a capital of \$11,136,953 in 1888; the return for 1889 was \$9,-739,403, a decrease of \$1,397,550, or 12.55 per cent. In the manufacture of straw and palm leaf goods, the capital invested was reported by 16 establishments, in 1888, as being \$1,312,-454 and in 1889, \$1,300,508; this shows a decrease of \$11,946 or 0.91 per cent in the latter year.

In 1888 the capital invested in the 86 establishments engaged in the manufacture of woollen goods was \$24,848,267, and in 1889 the same establishments returned capital to the amount of \$23,134,159; this was a decrease of \$1,714,108, or

6.90 per cent. In Worsted Goods the capital shown by the 16 establishments considered was, in 1888, \$4,827,893 and in 1889, \$4,980,822, an increase of \$152,929, or 3.17 per cent. The 187 establishments contained in the other 29 industries, the capital of which, in 1889, was \$34,955,770, or 11.70 per cent of the capital invested in all industries, show an increase over the previous year of \$437,708, or 1.27 per cent, when considered as a whole; the aggregate of capital in 1888 was \$34,518,062. Considering the 1,364 establishments in the 47 industries, we find a total capital in 1888 of \$303,168,753, and in 1889 of \$298,805,163; this was a decrease in the latter year of \$4,363,590, or 1.44 per cent.

STOCK USED: BY INDUSTRIES.

The schedule for 1888 called only for the *principal* articles of stock used, while that for 1889 called for *all* articles, and included not only the principal articles but all other materials, such as coal, gas, oil, chemicals, boxes, barrels, and various minor articles consumed in the production of the manufactured goods; in short, the *total* value of all stock and materials used. As a consequence, the figures given for 1889 are unusually complete.

In the report on the Statistics of Manufactures for 1890 it will be possible to place in comparison, for each establishment making a return, the total value of all articles of stock used during the year, as the schedule for 1890 will call for exactly the same items that have been returned on the schedules for 1889. shall then be able to present a series of comparisons based upon the quantity and value of the same articles of stock used by the same establishments for the two years 1889 and 1890. same plan will be followed in 1890 regarding the principal and other articles of goods made; that is, exactly the same articles will be called for that were returned in 1889 and a series of comparative tables will be prepared upon the same basis as those for stock used, and similar to those published in the "Introduction" to the report on the Statistics of Manufactures for 1888, which compared quantities and prices for the two Census years, 1875 and 1885. We believe that in this manner a valuable contribution to the industrial statistics of the Commonwealth can be prepared, for the returns will allow

of comparisons being made on the basis of fixed quantities as well as on the usual basis of fluctuating values.

Upon the basis of the returns for 1889 we have estimated for 17 leading industries, covering 1,103 establishments, the figures representing other articles of stock consumed during the year 1888, the value of the principal articles being supplied by the manufacturers themselves. The total value of all stock used in 1889 was considered as 100 per cent, and the principal articles and other articles bore relation to the total as shown in the following table:

				PERCENTA	AGES OF-
Industries.				Principal Arti- cles of Stock Used	Other Articles of Stock Used
Boots and shoes, Carpetings, Carriages and wagons, Clothing, Cotton goods, Furniture, Hosiery and knit goods, Leather, Machines and machinery, Metals and metallic goods, Metals instruments of metallic goods,				82.64 90.39 66.49 74.93 87.78 69.06 86.21 84.47 65.99 80.62	17.36 9.61 33.51 25.07 12.22 30.94 13.79 15.53 34.01 19.14
Musical instruments and materials. Paper and paper goods, Print works, dye works, and bleach Rubber and elastic goods, Straw and palm leaf goods, Woollen goods, Worsted goods,	eri :	es, :	:	71.82 75.71 94.40 86.40 70.58 84.68 92.01	$\begin{array}{c} 28.18 \\ 24.29 \\ 5.60 \\ 13.60 \\ 29.42 \\ 15.32 \\ 7.99 \end{array}$

This table explains itself and needs no comment save to say that these percentages have been derived from the establishments making return for the year 1889. In order to estimate the total value of stock used in the different industries, we have applied these percentages to the corresponding establishments for the year 1888, which, as we have already stated, returned the value of principal articles only.

On this basis the following table shows the estimated value of all stock and materials used in 17 leading industries in 1888 and the actual value of all stock and materials used in the same industries in 1889. The latter year is compared with 1888 in order to show the increase or decrease in value, with equivalent percentages.

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T	Number of Estab- lishments		STOCK USED	Increase (+),	Percent-
· INDUSTRIES.	Con- sidered	1888	1889	Decrease (-), in 1889	ages
Boots and shoes,	. 291	\$34,881,902	\$36,180,864	+\$1,298,962	+3.72
Carpetings,	. 5	3,481,946	4,036,614	+554,668	+15.93
Carriages and wagons,	. 19	938,050	746,140	-191,910	-20.46
Clothing,	. 47	9,496,722	8,793,010	—703,71 2	-7.41
Cotton goods,	. 136	43,645,524	48,702,524	+5,057,000	+11.59
Furniture,	. 47	2,613,848	2,656,282	+42,434	+1.62
Hosiery and knit goods,	. 11	1,701,900	1,679,565	-22,335	-1.31
Leather,	. 96	8,738,569	9,780,043	+1,041,474	+11.92
Machines and machinery,	. 84	6,040,349	6,915,248	+874,899	+14.48
Metals and metallic goods,	. 122	10,908,444	10,838,793	-69,651	-0.64
Musical instruments and materials,	. 23	1,361,349	1,684,112	+322,763	+23.71
Paper and paper goods,	. 68	10,516,997	11,473,910	+956,913	+9.10
Print works, dye works, and bleach	1-				
eries,	. 16	9,955,500	10,717,046	+761,546	+7.65
Rubber and elastic goods,	. 20	8,714,705	9,469,014	+754,309	+8.66
Straw and palm leaf goods, .	. 16	2,127,900	1,513,005	-614,895	-28.90
Woollen goods,	. 86	15,578,581	16,796,912	+1,218,331	+7.82
Worsted goods,	. 16	4,566,135	5,077,349	+511,214	+11.20

From this table it will be seen that, in 1888, the estimated value of stock used in the boot and shoe industry was \$34,881,-902, and the actual value in 1889 was \$36,180,864, an increase of \$1,298,962, or 3.72 per cent. In Carpetings, in 1888, the value of stock used was \$3,481,946, rising in 1889, to \$4,036,614; an increase of \$554,668, or 15.93 per cent. The establishments classed under Cotton Goods show an increase of \$5,057,000, or 11.59 per cent, in comparing 1889 with 1888; the aggregate of stock used being, in 1888, \$43,645,524, and, in 1889, \$48,702,524. When we consider the leather industry we find an increase of \$1,041,474, or 11.92 per cent, in 1889 over the estimated value of stock used in the same 96 establishments in 1888; the aggregate value being \$8,738,569 in 1888, and \$9,780,043 in 1889. An increase is shown in Machines and Machinery of \$874,899, or 14.48 per cent, the aggregate value of stock used being \$6,040,349 in 1888, and \$6,915,248 in 1889. An increase is also shown in Musical Instruments and Materials, the value of stock used rising from \$1,361,349 in 1888, to \$1,684,112 in 1889, an increase of \$322,763, or 23.71 per cent.

The establishments engaged in the manufacture of paper and paper goods used stock estimated at \$10,516,997 in value in 1888, and stock with an actual value of \$11,473,910 in 1889;

an increase of \$956,913, or 9.10 per cent. In Woollen Goods, the value of stock used in 1888 was \$15,578,581, and in 1889, \$16,796,912, an increase of \$1,218,331, or 7.82 per cent. The other industries showing a percentage of increase in the value of stock used are Furniture, 1.62 per cent; Print Works, Dye Works, and Bleacheries, 7.65 per cent; Rubber and Elastic Goods, 8.66 per cent; and Worsted Goods, 11.20 per cent. The industries showing a decrease are Carriages and Wagons, 20.46 per cent; Clothing, 7.41 per cent; Hosiery and Knit Goods, 1.31 per cent; Metals and Metallic Goods, 0.64 per cent; and Straw and Palm Leaf Goods, 28.90 per cent.

Goods Made: By Industries.

In the analysis of "Comparative Product: By Establishments" we enlarged upon the value of goods made by the 3,494 establishments reporting the value of product for one or more of the three years, 1887, 1888, and 1889. The 1,364 establishments shown on pages 60 to 63 made return for each of the two years 1888 and 1889. The comparison made of these establishments in the analysis of "Comparative Product" exhibited the value of goods made in 1889 as compared with 1888 by classes of product. The comparison now under consideration deals with industries instead of classes.

Industries,	Number of Es- tablish-	VALUE OF G	oods Made	Increase (+),	Percent-
INDUSTRAINS.	ments Consid- ered	1888	1889	Decrease (), in 1889	ages
Agricultural implements,	5	\$1,276,435	\$1,305,138	+\$28,703	+2.25
Arms and ammunition,	10	1,829,268	1,835,261	+5,993	+0.33
Artisans' tools,	8	1,241,443	1,270,329	+28,886	+2.33
Boots and shoes,	291	57,755,697	59,878,717	+2,123,020	+3.68
Boxes (paper and wooden),	23	1,812,478	1,842,223	+29,745	+1.64
Burial cases, caskets, coffins, etc., .	1	100,000	76,566	-23,434	-23.43
Buttons and dress trimmings, .	4	368,957	277,811	—91,146	-24.70
Carpetings,	5	5,869,546	6,428,516	+558,970	+9.52
Carriages and wagons,	19	1,863,402	1,640,269	-223,133	-11.97
Chemical preparations (compound-					
ed),	2	88,722	75,491	-13,231	-14.91
Clocks and watches,	2	457,666	490,956	+33,290	+7.27
Clothing,	47	16,500,887	15,628,004	-872,883	-5.29
Cooking, lighting, and heating					
apparatns,	2	280,000	260,850	-19,150	-6.84
Cordage and twine,	12	6,833,105	8,696,092	+1,862,987	+27.26

Industries.	Number of Es- tablish-	VALUE OF C	Goods Made	Increase (+),	Percent
	ments Consid- ered	1888	1889	Decrease (), in 1889	ages
Cotton goods,	136	\$81,238,283	\$84,579,763	+\$3,341,480	+4.11
Cotton, woollen, and other textiles,	2	3,258,241	2,970,890	-287,351	-8.8:
Dyestuffs,	1	127,000	135,000	+8,000	+6.30
Emery and sand paper and cloth, etc.,	2	171,720	180,901	+9,181	+5.3
Fertilizers,	1	60,000	60,000	-	
Flax, hemp, and jute goods,	3	1,434,539	1,393,477	-41,062	-2.S
Food preparations,	74	40,288,239	37,712,271	-2,575,968	-6.39
Furniture,	47	5,349,015	5,275,561	-73,454	-1.3
Glass,	5	462,339	516,219	+53,880	+11.6
Hose: rubber, linen, etc.,	1	550,000	458,000	-92,000	-16.7
Hosiery and knit goods,	11	3,344,940	2,880,462	-464,478	-13.89
Leather,	96	14,845,650	14,114,660	-780,990	-4.9
Linen,	3	1,299,951	1,191,446	-108,505	-8.3
Liquors: malt, distilled, and fer-					
mented,	23	5,076,966	5,027,454	-49,512	-0.9
Lumber,	1	23,500	14,730	_s,770	-37.3
Machines and machinery,	84	16,139,370	18,041,643	+1,902,273	+11.7
Metals and metallic goods,	122	22,528,617	24,817,604	+2,288,987	+10.1
Mixed textiles,	11	2,183,956	2,956,641	+772,685	+35.3
Musical instruments and materials,	23	4,140,925	4,500,733	+359,808	+8.6
Oils and illuminating fluids,	1	263,760	256,000	-7,760	-2.9
Paper and paper goods,	68	18,214,325	19,127,017	+912,692	+5.0
Print works, dye works, and					·
bleacheries,	16	14,423,860	14,830,476	+406,616	+2.8
Railroad construction and equip-					
ment,	1	156,745	166,356	+9,611	+6.1
Rubber and elastic goods,	20	15,175,629	14,649,870	-525,759	-3.4
Shipbuilding,	6	857,032	911,500	+54,468	+6.3
Silk and silk goods,	7	4,083,301	4,536,297	+452,996	+11.0
Stone,	19	1,511,447	1,483,989	-27,458	-1.8
Straw and palm leaf goods,	16	3,301,094	2,894,900	-406,194	-12.3
Tallow, candles, soap, and grease,	13	2,304,611	2,520,188	+215,577	+9.3
Whips, lashes, and stocks,	1	205,310	195,706	-9,604	-1.6
Wooden goods,	17	1,414,992	1,362,982	-52,010	-3.6
Woollen goods,	86	26,721,808	27,238,302	+516,494	+1.9
Worsted goods,	16	6,608,195	6,989,697	+381;502:	+5.7
ALL INDUSTRIES,	1,364	\$394,042,966	\$403,696,958	+\$9,653,992	+2.45

The total value of goods made in the 1,364 establishments considered was, in 1888, \$394,042,966 and in 1889, \$403,696,958, showing an increase of \$9,653,992, or 2.45 per cent; which is slightly below the normal rate. The industries which show an increase of product greater than that for All Industries, are as follows: Boots and Shoes, 3.68 per cent; Carpetings, 9.52 per cent; Clocks and Watches, 7.27 per cent; Cordage and Twine, 27.26 per cent; Cotton Goods, 4.11 per

cent; Dyestuffs, 6.30 per cent; Emery and Sand Paper and Cloth, etc., 5.35 per cent; Glass, 11.65 per cent; Machines and Machinery, 11.79 per cent; Metals and Metallic Goods, 10.16 per cent; Mixed Textiles, 35.38 per cent; Musical Instruments and Materials, 8.69 per cent; Paper and Paper Goods, 5.01 per cent; Print Works, Dye Works, and Bleacheries, 2.82 per cent; Railroad Construction and Equipment, 6.13 per cent; Shipbuilding, 6.36 per cent; Silk and Silk Goods, 11.09 per cent; Tallow, Candles, Soap, and Grease, 9.35 per cent; and Worsted Goods, 5.77 per cent.

The industries showing a percentage of increase less than that shown for All Industries are as follows: Agricultural Implements, 2.25 per cent; Arms and Ammunition, 0.33 per cent; Artisans' Tools, 2.33 per cent; Boxes (Paper and Wooden), 1.64 per cent; and Woollen Goods, 1.93 per cent. The increase ranges from 0.33 per cent in Arms and Ammunition to 35.38 per cent in Mixed Textiles. No change in the value of goods made was reported by the establishments engaged in the manufacture of Fertilizers.

The industries showing a decrease in the value of goods made in 1889 as compared with 1888 are:

Burial Cases, Caskets, Coffins, etc.
Buttons and Dress Trimmings.
Carriages and Wagons.
Chemical Preparations (Compounded).
Clothing.
Cooking, Lighting, and Heating Apparatus.
Cotton, Woollen, and Other Textiles.
Flax, Hemp, and Jute Goods.
Food Preparations.
Furniture.
Hose: Rubber, Linen, etc.

Leather.
Linen.
Liquors: Malt, Distilled, and Fermented.
Lumber.
Oils and Illuminating Fluids.
Rubber and Elastic Goods.
Stone.
Straw and Palm Leaf Goods.
Whips, Lashes, and Stocks.

Hosiery and Knit Goods.

Wooden Goods.

The decrease ranges from 0.98 per cent in Liquors: Malt, Distilled, and Fermented to 37.32 per cent in Lumber.

Considering the returns of value of goods made in the leading industries we find that in Boots and Shoes the product value in 1888 was \$57,755,697, rising in 1889 to \$59,878,717, an

increase of \$2,123,020, or 3.68 per cent. In Carpetings the value of product in 1888 was \$5,869,546, and in 1889 it reached \$6,428,516, an increase of \$558,970, or 9.52 per cent. A decrease in the value of goods made is shown in the carriage and wagon industry of \$223,133, or 11.97 per cent, when 1889 is compared with 1888; a decrease is also seen in Clothing of \$872,883, or 5.29 per cent. The 136 establishments engaged in the manufacture of cotton goods have a product value of \$81,238,283 in 1888, and in 1889 of \$84,579,763, an increase of \$3,341,480, or 4.11 per cent. In the 74 establishments whose product is classified under the head of Food Preparations, a decrease in value of \$2,575,968, or 6.39 per cent, is shown in 1889 as compared with 1888.

In the 47 establishments in the furniture industry, a loss in the value of goods made of \$73,454, or 1.37 per cent, is seen in 1889. We find in Hosiery and Knit Goods a product value of \$3,344,940 in 1888, and \$2,880,462 in 1889; a decrease of \$464,478, or 13.89 per cent. The leather industry exhibits a decrease in 1889 as compared with 1888 of \$730,990, or 4.92 per cent; the aggregate product in 1888 being \$14,845,650 and in 1889 \$14,114,660. In Machines and Machinery, 84 establishments exhibit a product value in 1888 of \$16,139,370 and in 1889 of \$18,041,643. This was an increase in the latter year of \$1,902,273, or 11.79 per cent. There are 122 establishments represented in Metals and Metallic Goods the output of which was \$22,528,617 in 1888, and \$24,817,604 in 1889, an increase of \$2,288,987, or 10.16 per cent.

In Musical Instruments and Materials, 23 establishments produced goods valued at \$4,140,925 in 1888, and \$4,500,733 in 1889. This was an increase of \$359,808, or 8.69 per cent. In the 68 establishments in Paper and Paper Goods the value of goods made in 1888 was \$18,214,325; this increased \$912,692, or 5.01 per cent, in 1889, the aggregate value of product in that year being \$19,127,017. In Print Works, Dye Works, and Bleacheries 16 establishments are represented; the manufactured product of these establishments in 1888 was valued at \$14,423,860; in 1889 it rose to \$14,830,476, an increase over the previous year of \$406,616, or 2.82 per cent. When we consider the 20 establishments in the rubber and elastic goods

industry we find in comparing 1888 with 1889 that a decrease in the value of product is shown in the latter year, the aggregates being \$15,175,629 and \$14,649,870, respectively. The aggregate decrease was \$525,759, or 3.46 per cent. In Straw and Palm Leaf Goods, with 16 establishments represented in the comparison, a decrease is noted in 1889 of 12.30 per cent. The value of product in 1888 was \$3,301,094 as against \$2,894,900 in 1889, the total decrease being \$406,194. In Woollen Goods, 86 establishments produced goods valued at \$26,721,808 in 1888, rising in 1889 to \$27,238,302, an increase of \$516,494, or 1.93 per cent. In Worsted Goods, 16 establishments, a product value of \$6,608,195 is seen in 1888, and of \$6,989,697 in 1889; an increase of \$381,502, or 5.77 per cent.

WAGES PAID: BY INDUSTRIES.

A table which shows the total amount of wages paid during the year 1889 in the 1,364 establishments considered, is presented on page 65; the figures for 1888 are also shown in order that comparisons may be easily made. The aggregate amount paid in wages in 1888 was \$82,188,350, and in 1889, \$84,121,-837, an increase in the latter year of \$1,933,487, or 2.35 per The industries showing an increase greater than that shown for All Industries are as follows: Artisans' Tools, 9.01 per cent; Boots and Shoes, 3.41 per cent; Boxes (Paper and Wooden), 3.77 per cent; Carpetings, 9.58 per cent; Cordage and Twine, 9.74 per cent; Cotton Goods, 3.63 per cent; Emery and Sand Paper and Cloth, etc., 5.85 per cent; Flax, Hemp, and Jute Goods, 12 per cent; Glass, 16.67 per cent; Hose: Rubber, Linen, etc., 4.95 per cent; Liquors: Malt, Distilled, and Fermented, 2.86 per cent; Machines and Machinery, 10.09 per cent; Metals and Metallic Goods, 4.98 per cent; Musical Instruments and Materials, 6.10 per cent; Print Works, Dye Works, and Bleacheries, 5.57 per cent; Railroad Construction and Equipment, 26.24 per cent; Tallow, Candles, Soap, and Grease, 6.32 per cent; Woollen Goods, 2.54 per cent; and Worsted Goods, 10.31 per cent. An increase less than that shown for All Industries is noted in the following: Food Preparations, 1.94 per cent; Mixed Textiles, 0.02 per cent; Paper and Paper Goods, 1.20 per cent; and Silk and Silk Goods, 1.73 per cent.

A decrease in the total amount of wages paid during the year is shown in the following industries:

Agricultural Implements.
Arms and Ammunition.
Burial Cases, Caskets, Coffins, etc.
Buttons and Dress Trimmings.
Carriages and Wagons.
Chemical Preparations (Compounded).
Clocks and Watches.
Clothing.
Cooking, Lighting, and Heating Apparatus.
Cotton, Woollen, and Other Textiles.

Dyestuffs.

Fertilizers.
Furniture.
Hosiery and Knit Goods.
Leather.
Linen.
Lumber.
Oils and Illuminating Fluids.
Rubber and Elastic Goods.
Shipbuilding.
Stone.
Straw and Palm Leaf Goods.
Whips, Lashes, and Stocks.
Wooden Goods.

The decrease ranges from 1.31 per cent in Wooden Goods to 54.55 per cent in Lumber.

It must not be inferred from the figures given that wages were either higher or lower in 1889 than in 1888. The increase or decrease is but nominal in any case and simply indicates the fluctuation in employment. Further consideration of the wage question is given in the next division.

AVERAGE YEARLY EARNINGS: BY INDUSTRIES.

By referring to page 61, in the last column of figures there shown, we find the average yearly earnings in each industry for 1888, and on page 63 the average yearly earnings for 1889. We present in text form the average yearly earnings for 1889 ranging from the highest, \$744.74, in Clocks and Watches, to the lowest, \$305.44, in Linen.

\$744.74 Clocks and Watches.

731.51 Liquors: Malt, Distilled, and Fermented.

690.68 Musical Instruments and Materials.

621.58 Shipbuilding.

607.36 Arms and Ammunition.

606.28 Artisans' Tools.

598.51 Stone.

572.84 Carriages and Wagons.

571.43 Oils and Illuminating Fluids.

\$561.27 Machines and Machinery

558.41 Whips, Lashes, and Stocks.

553.33 Fertilizers.

527.49 Cooking, Lighting, and Heating Apparatus.

525.47 Chemical Preparations (Compounded).

519.82 Leather.

513.00 Burial Cases, Caskets, Coffins, etc.

510.41 Boots and Shoes.

502.31 Agricultural Implements.

\$501.61 Metals and Metallic Goods. 490.24 Dyestuffs. 481.59 Wooden Goods. 477.57 Emery and Sand Paper and Cloth, etc. 475.16 Railroad Construction and Equipment. 464.56 Print Works, Dye Works, and Bleacheries. 463.54 Furniture. 454.85 Food Preparations. 454.55 Lumber. 443.62 Hose: Rubber, Linen, etc. 443.48 Tallow, Candles, Soap, and Grease. 432.09 Glass.

421.38 Clothing.

\$415.26 Boxes (Paper and Wooden). 414.10 Rubber and Elastic Goods. 408.07 Paper and Paper Goods. 394.75 Straw and Palm Leaf Goods. 390.37 Cotton, Woollen, and Other

390.37 Cotton, Woollen, and Othe Textiles. 382.11 Mixed Textiles. 364.34 Woollen Goods.

382.11 Mixed Textiles.
364.34 Woollen Goods.
362.41 Carpetings.
361.99 Worsted Goods.
334.23 Cordage and Twine.
332.99 Silk and Silk Goods.
332.22 Buttons and Dress Trimmings.

329.33 Cotton Goods. 314.50 Hosiery and Knit Goods.

314.09 Flax, Hemp, and Jute Goods. 305.44 Linen.

The table which follows shows a comparison as to average yearly earnings for the years 1888 and 1889 with the increases or decreases noted by amounts and percentages.

INDUSTRIES.		E YEARLY NINGS	Increase (+),	Percent-
TABUSTRIES.	1888	1889	Decrease (—), in 1889	ages
Agricultural implements,	\$536.08	\$502.31	-\$33.77	— 6.30
Arms and ammunition,	601.83	607.36	+5.53	+0.92
Artisans' tools,	594.71	606.28	+11.57	+1.95
Boots and shoes,	502.87	510.41	+7.54	+1.50
Boxes (paper and wooden),	404.56	415.26	+10.70	+2.64
Burial cases, caskets, coffins, etc., .	266.67	513.00	+246.33	+92.37
Buttons and dress trimmings,	293.39	332.22	+38.83	+13.23
Carpetings,	348.28	362.41	+14.13	+4.06
Carriages and wagons,	641.33	572.84	-68.49	10.68
Chemical preparations (compounded),	526.36	525.47	-0.89	-0.17
Clocks and watches,	687.02	744.74	+57.72	+8.40
Clothing,	474.82	421.38	-53.44	11.25
Cooking, lighting, and heating ap-				
paratus,	591.35	527.49	-63.86	-10.80
Cordage and twine,	336.55	334.23	-2.32	0.69
Cotton goods,	324.13	329.33	+5.20	+1.60
Cotton, woollen, and other textiles,	365.02	390.37	+25.35	+6.94
Dyestuffs,	872.14	490.24	-381.90	- 43.79
Emery and sand paper and cloth, etc.,	513.08	477.57	-35.51	-6.92

Industries.	Averag Ear	E YEARLY NINGS	Increase (+),	Percent-
INDUSTRIES.	1888	1889	Decrease (-), in 1889	ages
Fertilizers,	\$416.67	\$553.33	+\$136.66	+32.80
Flax, hemp, and jute goods,	302.54	314.09	+11.55	+3.82
Food preparations,	440.08	454.85	+14.77	+3.30
Furniture,	447.35	463.54	+16.19	+3.62
Glass,	416.77	432.09	+15.32	÷3.68
Hose: rubber, linen, etc.,	474.72	443.62	-31.10	<u>-6.55</u>
Hosiery and knit goods,	318.25	314.50	-3.75	-1.18
Leather,	535.37	519.82	— 15.55	-2.90
Linen,	302.29	305.44	+3.15	+1.04
Liquors: malt, distilled, and fer-			·	•
mented,	699.18	731.51	+32.33	+4.62
Lumber,	500.00	454.55	-45.45	-9.09
Machines and machinery,	542.03	561.27	+19.24	+3.55
Metals and metallic goods,	485.70	501.61	+15.91	+3.28
Mixed textiles,	358.49	382.11	+23.62	+6.59
Musical instruments and materials,	669.32	690.68	+21.36	+3.19
Oils and illuminating fluids,	600.00	571.43	-28.57	-4.76
Paper and paper goods,	406.97	408.07	+1.10	+0.27
Print works, dye works, and bleach-				·
eries,	381.94	464.56	+82.62	+21.68
Railroad construction and equipment,	413.12	475.16	+62.04	+15.02
Rubber and elastic goods,	449.08	414.10	-34.98	
Shipbuilding,	655.95	621.58	— 34.37	
Silk and silk goods,	318.35	332.99	+14.64	+4.60
Stone,	554.61	598.51	+43.90	,
Straw and palm leaf goods,	383.18	394.75	+11.57	
Tallow, candles, soap, and grease, .	452.11	443.48	-8.63	-1.91
Whips, lashes, and stocks,	488.10	558.41	+70.31	+14.40
Wooden goods,	474.31	481.59	+7.28	+1.58
Woollen goods,	395.84	364.34	-31.50	•
Worsted goods,	356.24	361.99	+5.75	+1.61
ALL INDUSTRIES,	\$413.19	\$419.17	+\$5.98	+1.45

The average yearly earnings in 1888 were \$413.19, and in 1889, \$419.17, when taking all of the industries together. The following industries exhibit an increase in 1889 as compared with 1888: Arms and Ammunition 0.92 per cent; Artisans' Tools, 1.95 per cent; Boots and Shoes, 1.50 per cent; Boxes (Paper and Wooden), 2.64 per cent; Burial

Cases, Caskets, Coffins, etc., 92.37 per cent; Buttons and Dress Trimmings, 13.23 per cent; Carpetings, 4.06 per cent; Clocks and Watches, 8.40 per cent; Cotton Goods, 1.60 per cent; Cotton, Woollen, and Other Textiles, 6.94 per cent; Fertilizers, 32.80 per cent; Flax, Hemp, and Jute Goods, 3.82 per cent; Food Preparations, 3.36 per cent; Furniture, 3.62 per cent; Glass, 3.68 per cent; Linen, 1.04 per cent; Liquors: Malt, Distilled, and Fermented, 4.62 per cent; Machines and Machinery, 3.55 per cent; Metals and Metallic Goods, 3.28 per cent; Mixed Textiles, 6.59 per cent; Musical Instruments and Materials, 3.19 per cent; Paper and Paper Goods, 0.27 per cent; Print Works, Dye Works, and Bleacheries. 21.63 per cent; Railroad Construction and Equipment, 15.02 per cent; Silk and Silk Goods, 4.60 per cent; Stone, 7.92 per cent; Straw and Palm Leaf Goods, 3.02 per cent; Whips, Lashes, and Stocks, 14.40 per cent; Wooden Goods, 1.53 per cent; and Worsted Goods, 1.61 per cent.

A decrease in the average yearly earnings in 1889, as against 1888, is found in the following industries: Agricultural Implements, 6.30 per cent; Carriages and Wagons, 10.68 per cent; Chemical Preparations (Compounded), 0.17 per cent; Clothing, 11.25 per cent; Cooking, Lighting, and Heating Apparatus, 10.80 per cent; Cordage and Twine, 0.69 per cent; Dyestuffs, 43.79 per cent; Emery and Sand Paper and Cloth, etc., 6.92 per cent; Hose: Rubber, Linen, etc., 6.55 per cent; Hosiery and Knit Goods, 1.18 per cent; Leather, 2.90 per cent; Lumber, 9.09 per cent; Oils and Illuminating Fluids, 4.76 per cent; Rubber and Elastic Goods, 7.79 per cent; Shipbuilding, 5.24 per cent; Tallow, Candles, Soap, and Grease, 1.91 per cent; and Woollen Goods, 7.96 per cent.

As we have repeatedly stated, it must be borne in mind that these averages are not indicative of the rate of wages; no more so are the comparisons on page 65, showing the total amount paid in wages during the year. They are simply evidences of fluctuation in employment. According to the table on page 65, Burial Cases, Caskets, Coffins, etc., shows a decrease in the total amount of wages paid of 28.18 per cent, in 1889 as compared with 1888; yet the preceding analysis table shows that the average yearly earnings per individual increased during the same time \$246.33, or 92.37 per cent. Buttons and Dress

Trimmings shows a decrease of \$16,720, or 21.03 per cent, in total amount of wages paid in 1889 as against the previous year, while in the average yearly earnings per individual, an increase of \$38.83, or 13.23 per cent, is shown. Woollen Goods shows an increase in total amount of wages paid of 2.54 per cent, but a decrease of 7.96 per cent in individual average yearly earnings, and other industries exhibit equally varying conditions. These variations indicate fluctuation in employment; either the employment of a better or a poorer class of help, for a longer or a shorter period, as the case may be.

In this connection we quote from the report on the Statistics of Manufactures for 1888: "It should be borne in mind that these averages are not indicative of the rate of wages. are obtained by dividing the sum returned as the total of wages paid by the number representing the average of persons employed, without regard to sex or age. Such averages show relative conditions in each year from the above standpoint only, and should be closely compared with the data respecting the number of persons employed, and the length of time the various establishments were in operation, before deductions are drawn from them. Both these factors affect the divisor, and, therefore, affect the average wages. When the industries are compared one with another, wide differences appear in the amount of average yearly earnings. These differences are largely due to the relative degree of skill required in the different industries, and to differences in the proportion of males and females employed."

We present, for the purpose of enabling comparisons to be made as to the relative proportion of males and females employed in the 47 industries considered, a table which shows the average yearly earnings for 1889 in each industry, in connection with the percentages of males and females employed. These latter figures are based upon the returns of the Decennial Census of 1885. A careful study of this table will throw some light upon the apparently wide differences between the industries in the matter of average yearly earnings. As a rule the higher averages will be found in the industries that employ a large proportion of males and which require a high degree of skill.

	Average Yearly	EMPL	TAGE OF	,
Industries.	Earn- ings	CENSUS	or 1885	Sex
	1889	Males	Females	
Agricultural implements,	\$502.31	100.00	_	All males
Arms and ammunition,	607.36		7.84	More than nine-tenths males
Artisans' tools,		96.69	3.31	Nearly all males
Boots and shoes,	510.41	69.46		Nearly seven-tenths males
Boxes (paper and wooden),.	415.26	55.62	44.38	More than one-half males
Burnal cases, caskets, coffius, etc., Buttons and dress trimmings,	513.00 332.22	85.51 30.15	14.49 69.85	More than eight-tenths males
Carpetings,	362.41	42.12	57.88	Three-tenths males Nearly six-tenths females
Carriages and wagons,	572.84		1.29	Nearly all males
Chemical preparations (compounded),	525.47	97.89	2.11	Nearly all males
Clocks and watches,	744.74	60.52	39.48	Six-tenths males
Clothing,	421.38	28.25	71.75	More than seven-tenths fe-
Cooking, lighting, and heating appara-				males -
tus,	527.49	98.68	1.32	Nearly all males
Cordage and twine,	334.23	53.21	46.79	Nearly one-half females
Cotton goods,	329.33	44.96	55.04	More than one-half females
Cotton, woollen, and other textiles, .	390.37	50.54	49.46	About one-half females
Dyestuffs,	490.24	96.20	3.80	Nearly all males
Emery and sand paper and cloth, etc., Fertilizers,	477.57 553.33	93.69	6.31 0.62	More than nine-tenths males
Flax, hemp, and jute goods,	314.09	99.38 59.47	40.53	Nearly all males Four-tenths females
Food preparations,	454.85	82.28	17.72	More than eight-tenths males
Furniture,	463.54	91.00	9.00	More than nine-tenths males
Glass,	432.09	88.70	11.30	Nearly nine-tenths males
Hose: rubber, linen, etc.,	443.62		21.82	Nearly eight-tenths males
Hosiery and knit goods,	314.50	29.13	70.87	Seven-tenths females
Leather,	519.82	97.85	2.15	Nearly all males
Liquors: malt, distilled, and fermented,	305.44 731.51	43.20	56.80	Nearly six-tenths females
Lumber,	454.55	99.61 99.74	0.39 0.26	Nearly all males Nearly all males
Machines and machinery,	561.27	98.57	1.43	Nearly all males
Metals and metallic goods,	501.61	90.95	9.05	Nine-tenths males
Mixed textiles,	382.11	54.67	45.33	Nearly one-half females
Musical instruments and materials, .	690.68	98.10	1.90	Nearly all males
Oils and illuminating fluids,	571.43	96.83	3.17	Nearly all males
Paper and paper goods,	408.07	56.08	43.92	Nearly six-tenths males
Print works, dye works, and bleach-	101 50	05 17	24.00	Manathan dath touth and
eries,	464.56 475.16	65.17 99.22	34.83 0.78	More than sixth-tenths males
Rubber and elastic goods,	414.10	58.22	41.78	Nearly all males About four-tenths females
Shipbuilding,	621.58	99.35	0.65	Nearly all males
Silk and silk goods,	332.99	29.73	70.27	Seven-tenths females
Stone,	598.51	99.93	0.07	Nearly all males
Straw and palm leaf goods,	394.75	36.07	63.93	More than six-tenths females
Tallow, candles, soap, and grease,	443.48	93.73	6.27	More than nine-tenths males
Whips, lashes, and stocks,	558.41	64.41	35.59	More than six-tenths males
Wooden goods,	481.59 364.34	95.31	$\frac{4.69}{38.40}$	Nearly all males
Worsted goods,	361.99	$61.60 \\ 42.13$	57.87	About six-tenths males Nearly six-tenths females
				rearry six-tending tentales
ALL INDUSTRIES,	\$419.17	66.19	33.81	About one-third females

In Clocks and Watches, where six-tenths of the persons employed were males, and highly skilled labor is required, the average yearly earnings were \$744.74; in Liquors: Malt, Distilled, and Fermented, 99.61 per cent of the employés were males and the average yearly earnings were \$731.51; in Musical Instruments and Materials, 98.10 per cent of the persons employed were males and the average yearly earnings were \$690.68; and in Shipbuilding, 99.35 per cent of the employés were males and the average yearly earnings were \$621.58.

SMALLEST AND GREATEST NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

The consideration of this subject may be divided into several sections for purposes of easy comparison. The presentations in the body of the work cover the aggregates of smallest and greatest number of persons employed, the averages of smallest and greatest number of persons employed, the months during which the smallest and greatest number of persons were employed, and the aggregate of persons employed for each month, by industries. In all the tables, except the last, comparisons are made between 1888 and 1889.

AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

For a comparison of the average number of persons employed during the year we turn to page 61, which shows the number for 1888, and to page 63, which shows the number for 1889. From these two tables it will be seen that in 1888 the aggregate average number in the 1,364 establishments considered was 198,914, and in 1889, 200,685. We have brought forward the figures representing the average number of persons into the following table; 18 leading industries are given, the number of persons represented in the industries selected being 90.42 per cent of all the persons employed, on the average, for 1889. This table shows the average number of persons employed in 1888 and 1889, with the increases or decreases in the latter year expressed in numbers and percentages.

Industries.	AVERAGE 1 PERSONS 1	NUMBER OF EMPLOYED	Increase (+), or Decrease	Percent-	
		1888	1889	(-), in 1889	
Boots and shoes,		28,793	29,335	+542	+1.88
Carpetings,		3,952	4,102	+150	+3.80
Carriages and wagons,		1,039	1,046	+7	+0.67
Clothing,		5,331	5,482	+151	+2.8
Cotton goods,		64,263	65,546	+1,283	+2.00
Food preparations,		3,935	3,881	-54	-1.3
Furniture,		3,055	2,655	-400	-13.09

Industries.		NUMBER OF EMPLOYED	Increase (+), or Decrease	Percent-
	1888	1889	in 1889	ages
Hosiery and knit goods,	2,790	2,333	-457	-16.38
Leather,	4,604	4,578	26	-0.56
Machines and machinery,	10,403	11,060	+657	+6.32
Metals and metallic goods,	12,763	12,974	+211	+1.65
Musical instruments and materials, .	2,204	2,264	+60	+2.72
Paper and paper goods,	6,886	6,950	+64	+0.93
Print works, dye works, and bleach-				
eries,	4,263	3,700	-563	-13.21
Rubber and elastic goods,	5,832	6,221	+389	+6.67
Straw and palm leaf goods,	2,049	1,842	-207	_10.10
Woollen goods,	13,941	14,119	+178	+1.28
Worsted goods,	3,110	3,376	+266	+8.55
Other industries,	19,701	19,221	-480	-2.44
ALL INDUSTRIES,	198,914	200,685	+1,771	+0.89

In All Industries, as a whole, we find an increase of 1,771 persons, or 0.89 per cent, in 1889 as compared with 1888. Certain industries show a variation from this percentage for All Industries. We note particularly the increase of 6.32 per cent in Machines and Machinery, of 6.67 per cent in Rubber and Elastic Goods, and of 8.55 per cent in Worsted Goods. The largest decreases are shown in Furniture, 13.09 per cent; Hosiery and Knit Goods, 16.38 per cent; Print Works, Dve Works, and Bleacheries, 13.21 per cent; and Straw and Palm Leaf Goods, 10.10 per cent. The difference in the average number of persons employed was, in some instances, greater than in others; for example, the average number of persons employed in Boots and Shoes, in 1888, was 28,793, and in 1889, 29,335, an increase of 542, or 1.88 per cent. In Cotton Goods, the average number employed, in 1888, was 64,263, and in 1889, 65,546, an increase of 1,283, or two per cent. Carpetings the increase was 150, or 3.80 per cent. In Food Preparations, the decrease in 1889 as compared with 1888, was 54, or 1.37 per cent; and in Leather, 26, or 0.56 per cent.

The average number of persons employed, considered independently, may give an erroneous idea of the amount of employment furnished in the different industries. Therefore, before deductions are made, a careful consideration should be given to the tables showing the aggregates and averages of smallest and greatest number of persons employed for 1888 and 1889, and the aggregates by months for 1889.

SMALLEST NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

We find upon consulting the tables on pages 68 and 69 that the aggregate of the smallest number of persons employed in the 1,364 establishments in 1888, was 169,610, as against 176,097 in 1889. It is apparent that more persons were employed at periods of employment of the smallest number in 1889 than in the previous year, the increase being 6,487, or 3.82 per cent. From the following table some very interesting facts may be drawn:

Industries.		SMALLEST PERSONS	NUMBER OF EMPLOYED	Increase (+), or Decrease	Percent- ages
		1888	1889	in 1889	
Boots and shoes,		21,349	24,082	+2,733	+12.80
Carpetings,		3,627	3,478	-149	-4.11
Carriages and wagons,		743	884	+141	+18.98
Clothing,		3,962	4,067	+105	+2.65
Cotton goods,		59,801	61,596	+1,795	+3.00
Food preparations,		2,897	3,109	+212	+7.32
Furniture,		2,572	2,236	_336	-13.06
Hosiery and knit goods,		1,970	1,757	—213	-10.81
Leather,		3,629	3,609	-20	-0.55
Machines and machinery,		9,218	9,849	+631	+6.85
Metals and metallic goods, .		11,152	11,396	+244	+2.19
Musical instruments and materials,		2,009	2,088	+79	+3.93
Paper and paper goods,		6,474	6,487	+13	+0.20
Print works, dye works, and bleach	1-				•
eries,		3,224	3,653	+429	+13.31
Rubber and elastic goods,		5,246	5,087	159	-3.03
Straw and palm leaf goods, .		304	422	+118	+38.82
Woollen goods,		12,613	12,751	+138	+1.09
Worsted goods,		2,547	3,102	+555	+21.79
Other industries,		16,273	16,444	+171	+1.05
ALL INDUSTRIES,		169,610	176,097	+6,487	+3.82

In Boots and Shoes the increase, in 1889 over the previous year, in the number of persons employed at the periods of employment of the smallest number, was 2,733, or 12.80 per

cent; in Carriages and Wagons, 141, or 18.98 per cent; in Print Works, Dye Works, and Bleacheries, 429, or 13.31 per cent; in Straw and Palm Leaf Goods, 118, or 38.82 per cent; in Woollen Goods, 138, or 1.09 per cent; and in Worsted Goods, 555, or 21.79 per cent. A decrease is noted in Furniture of 336, or 13.06 per cent, and in Hosiery and Knit Goods, of 213, or 10.81 per cent.

From the table on page 71 we find that the average number of persons employed in each of the 1,364 establishments, at the periods of employment of the smallest number, was 129. In Carpetings the average was 696 and in Cotton, Woollen, and Other Textiles, 936. In Leather and Paper and Paper Goods the average smallest number remained the same in both years, that is, 38 and 95, respectively.

Greatest Number of Persons Employed: By Industries.

We found in examining the tables on pages 68 and 69, showing the aggregates of the smallest number of persons employed, that more persons were employed during these periods in 1889 than in 1888. Consulting the same tables we find that the same is true as regards the number of persons employed at the periods of employment of the greatest number, although the increase is quite small. The table which follows shows the aggregates of persons employed at the periods of employment of the greatest number in 18 leading industries, the increases or decreases being noted by numbers and percentages.

Industr	IES.				Number of Employed	or Decrease	Percent-
				1888	1889	in 1889	
Boots and shoes,				34,929	33,942	987	-2.83
Carpetings, .				4,143	4,325	+182	+4.39
Carriages and wagor	ıs,			1,203	1,179	24	-2.00
Clothing,				6,434	6,643	+209	+3.25
Cotton goods, .				66,629	68,086	+1,457	+2.19
Food preparations,				5,017	4,631	-386	7.69
Furniture,				3,259	2,949	310	-9.51
Hosiery and knit goo	ods,			3,923	2,899	1,024	-26.10
Leather,				5,286	5,356	+70	+1.32
Machines and machin				11,531	12,198	+667	+5.78
Metals and metallie	good	s,	•	14,080	14,421	+341	+2.42

Industries.		NUMBER OF EMPLOYED	Increase (+), or Decrease	Percent-
	1888	1889	in 1889	
Musical instruments and materials, .	2,397	2,481	+84	+3.50
Paper and paper goods,	7,224	7,387	+163	+2.26
Print works, dye works, and bleach-				
eries,	4,728	4,640	88	-1.86
Rubber and elastic goods,	6,482	6,843	+361	+5.57
Straw and palm leaf goods,	3,364	3,128	-236	-7 .02
Woollen goods,	14,668	15,013	+345	+2.35
Worsted goods,	3,433	3,616	+183	+5.33
Other industries,	22,577	21,712	— 865	-3.88
ALL INDUSTRIES,	221,307	221,449	+142	+0.06

The largest decrease is found in Hosiery and Knit Goods, amounting to 1,024 persons, or 26.10 per cent. The largest increase is found in Cotton Goods, rising from 66,629, in 1888, to 68,086, in 1889, an increase of 1,457 persons, or 2.19 per cent. The increase for All Industries is 142, or 0.06 per cent, and is exceeded in all of the industries showing an increase.

As shown in the table on page 71, the number of persons employed in each of the 1,364 establishments, on an average, at the periods of employment of the greatest number, was the same in both years, that is, 162.

We next bring together, by groups, the figures printed in the reports on the Statistics of Manufactures for 1886, 1887, and 1888, with those presented in this volume, in order to show the "range" between the smallest and the greatest number of persons employed in all the industries as a whole.

	C	OMPARA	ATIVE '	YEARS.		:	Number of Estab- lishments Considered	Aggregates of Persons Employed at Periods of Em- ployment of Smallest Number	Aggregates of Persons Employed at Periods of Em- ployment of Greatest Number	"Range"
1886, 1887,							1,027 1,027	129,843 135,271	167,913 172,175	38,070 36,904
1887, 1888,	:	:		:			1,140 1,140	149,714 147,593	190,194 191,234	40,480 43,641
1888, 1889,		:	:	•	•		1,364 1,364	169,610 176,097	221,307 221,449	51,697 45,352

It will be seen from the first column of this table that the years compared correspond with the reports published on the Statistics of Manufactures, and that the number of establishments considered in each group differs from the one preceding; that is, in the first group 1,027 establishments are shown for 1887 and in the second 1,140 are shown for the same year. The reason for this difference is fully explained upon page 132 of this Analysis. The table presents figures representing the number of persons employed at the periods of employment of the smallest and of the greatest number, and the difference or "range," between the two periods. The features of the table may be more readily seen by reducing the aggregates to percentages, considering the number of persons employed at periods of employment of greatest number as 100 per cent, which is done in the following table:

Сом	PARAT	rive Yi	CARS.		Number of Estab- Iishments Considered	Percentages of Persons Employed at Periods of Employ- ment of Smallest Number, of Persons Employed at Periods of Employment of Greatest Number	Range (Unemployed at some time Dur- ing the Year)	Aggregates: Persons Em- ployed at Periods of Em- ployment of Greatest Number
1886,. 1887,.	:		:		1,027 1,027	77.33 78.57	$22.67 \\ 21.43$	100.00 100.00
1887,. 1888,.	:			:	1,140 1,140	$78.72 \\ 77.18$	$\frac{21.28}{22.82}$	100.00 100.00
1888,. 1889,. =		:		:	1,364 1,364	76.64 79.52	$\frac{23.36}{20.48}$	100.00 100.00

The salient point brought out by this table is that, while the range between the aggregates of the smallest and greatest number of persons employed at periods of employment as shown in the first table appears to be large, when reduced to percentages it shows but slight variation. These figures would seem to admit of but one conclusion. As the manufacturing industries of the Commonwealth are to-day conducted, about one-fourth of the persons employed are out of employment for a greater or less period at some time during the year. This may mean that the period of unemployment extends over one day, one week, or it may be a month or more. Before deductions are drawn, however, careful attention should be given to the analysis of the subject entitled "Aggregates of Persons

Employed — 1889: By Industries," which appears farther on in this Analysis.

Months — 1888, 1889: By Industries.

On pages 72 to 89 we present, by industries, the number of establishments considered and the number of persons employed at the periods of employment of the smallest and the greatest The table shows that during certain months of the years 1888 and 1889, the specified number of establishments reported the employment of the smallest and of the greatest number, respectively. The same establishments may not have reported the same month in the two years as the period during which the smallest number of persons were employed, and it does not follow that the busy season, so called, of any establishment keeps within the same limits each year. It is apparent, judging by the returns as presented in this table, that the busy season, as such, does not appear to be distinctly outlined except in the case of Straw and Palm Leaf Goods and one or two other industries. This is, perhaps, more fully brought out when we consider All Industries.

The first table in this division of the Analysis relating to persons employed, brings together for All Industries, for the years 1888 and 1889, the number of establishments and the number of persons employed at the periods of employment of the smallest number, presumably the "dull" season.

	1	Periods of E	MPLOYMEN	T OF SMALLES	ST NEMBER	
Months.		1888			1889	
	Estab- lishments	Persons Employed	Aver- ages	Estab- lishments	Persons Employed	Aver- ages
January,	135	15,110	112	292	35,105	120
February,	66	8,339	126	72	10,353	144
March,	44	4,570	104	62	7,935	128
April,	65	6,782	104	61	11,524	189
May,	81	11,060	137	69	9,841	143
June,	95	10,791	114	77	10,236	133
July,	176	19,155	109	115	14,240	124
August,	89	12,137	136	91	11,673	128
September,	55	11,017	200	85	12,869	151
October,	57	8,193	144	53	9,432	178
November,	109	13,879	127	67	11,079	165
December,	138	15,430	112	75	8,394	112
During the year, .	254	33,147	131	245	23,416	96
TOTALS, .	1,364	169,610	124	1,364	176,097	129

The number of persons employed each month, as shown in the preceding table, does not vary to any considerable extent when the number of establishments is taken as the divisor and an average of the number of persons employed in each establishment is obtained. The largest variation is found in April; in 1888, 65 establishments employed 6,782 persons, and, in 1889, 61 establishments employed 11,524 persons at the periods of employment of smallest number, the average number of persons to each establishment being 104 and 189, respectively. The next largest variation is found in September, 55 establishments employing 11,017 persons in 1888, and 85 establishments employing 12,869 persons, in 1889, the averages per establishment being 200 and 151, respectively. Other large variations occur in March, October, November, and in the line "During the year."

The next analysis table deals with the periods of employment of greatest number and indicates, presumably, the "busy" season.

	I	PERIODS OF E	MPLOYMEN	T OF GREATES	T NUMBER	
Months.		1888			1889	
	Estab- lishments	Persons Employed	Aver- ages	Estab- lishments	Persons Employed	Aver- ages
January,	112	21,456	192	193	27,370	142
February,	45	9,166	204	77	11,700	152
March,	92	11,803	128	87	14,611	168
April,	73	12,747	175	91	12,824	141
May,	56	10,729	192	67	8,399	125
June,	90	16,260	181	69	11,806	171
July,	87	12,597	145	72	13,539	188
August,	94	14,398	153	87	15,323	176
September,	94	14,075	150	83	11,985	144
October,	114	17,182	151	99	19,230	194
November,	87	17,874	205	74	21,393	289
December,	166	29,873	180	120	29,853	249
During the year, .	254	33,147	131	245	23,416	96
Totals, .	1,364	221,307	162	1,364	221,449	162

If, as stated in reviewing the last table, we divide the persons employed in each month by the specified number of establishments, we find that the largest variations, in the above table, are to be found in the months of May, November, and December. The average number of persons employed at the periods of employment of greatest number, in each establishment, was, for

May, 192 in 1888, and 125 in 1889; for November, 205 in 1888, and 289 in 1889; and for December, 180 in 1888, and 249 in 1889. Variations also occur in January, February, March, April, July, October, and "During the year."

In many establishments the number of persons employed is the same during the entire year. We bring forward in the next analysis table the whole number of establishments in the industries considered, the number of establishments reporting persons employed during the entire year, the average number of persons employed during the year, the number of persons employed during the entire year, and the percentages of establishments and of persons employed, for the year 1888.

	ESTABL	ISHMENTS	Persons	EMPLOYED	PERCE	NTAGES
Industries.	Whole Number Con- sidered	Number reporting Employ- ment during the entire Year	Average Num- ber Em- ployed during the Year	Number Em- ployed during the entire Year	Estab- lish- ments	Persons Em- ployed
Artisans' tools,	8	1	693	88	12.50	12.70
Boots and shoes,	291	37	28,793	2,381	12.71	8.27
Boxes (paper and wooden),	23	3	1,187	110	13.04	9.27
Carpetings,	5	1	3,952	230	20.00	5.82
Carriages and wagons,	19	2	1,039	75	10.53	7.22
Clothing,	47	7	5,331	942	14.89	17.67
Cotton goods,	136	45	64,263	18,295	33.09	28.47
Flax, hemp, and jute goods,	3	1	S50	750	33.33	88.24
Food preparations,	74	25	3,935	326	33.78	8.28
Furniture,	47	10	3,055	440	21.28	14.40
Leather,	96	20	4,604	998	20.83	21.68
Liquors: malt, distilled, and fermented,	23	6	652	128	26.09	19.63
Machines and machinery,	84	9	10,403	1,053	10.71	10.12
Metals and metallic goods,	122	17	12,763	1,046	13.93	8.20
Mixed textiles,	11	2	1,022	166	18.18	16.24
Musical instruments and materials, .	23	6	2,204	272	26.09	12.34
Paper and paper goods,	68	18	6,886	1,836	26.47	26.66
Print works, dye works, and bleacheries,	16	1	4,263	112	6.25	2.63
Rubber and elastic goods,	20	3	5,832	243	15.00	4.17
Shipbuilding,	6	1	454	187	16.67	41.19
Tallow, candles, soap, and grease, .	13	6	441	152	46.15	34.47
Wooden goods,	17	2	928	100	11.76	10.78
Woollen goods,	86	31	13,941	3,217	36.05	23.08
TOTALS,	1,238	254	177,491	33,147	20.52	18.67

This table is somewhat complicated in its formation, and in order that it may be fully understood, we give a description of the correct manner of reading it. For instance, we may take the line for Boots and Shoes. There were 291 establishments, in this industry, that employed, in the aggregate, an

average number of 28,793 persons during the year. This employment was not continuous throughout the year; but there were 37 of the 291 establishments, or 12.71 per cent, that gave continuous employment throughout the year to their employés. The number so employed was 2,381, or 8.27 per cent of the aggregate average number (28,793) employed during the year. The figures denoting the average number of persons employed during the year were taken from page 61 for the year 1888 and from page 63 for the year 1889. A comparison of the tables on the two pages mentioned with the table given above will show more clearly the relations which they bear to each other.

We present a similar table for 1889.

		ESTABL	ISHMENTS	Persons :	EMPLOYED	PERCE	NTAGES
Industries.		Whole Number Con- sidered	Number reporting Employ- ment during the entire Year	Average Num- ber Em- ployed during the Year	Number Em- ployed during the entire Year	Estab- lish- ments	Persons Em- ployed
Arms and ammunition,		10	1	1,648	450	10.00	27.31
Boots and shoes,		291	64	29,335	3,522	21.99	12.01
Boxes (paper and wooden),		23	3	1,200	127	12.04	10.58
Carriages and wagons,		19	4	1,046	163	21.05	15.58
Chemical preparations (compounded	1),	2	1	15	6	50.00	40.00
Clothing,		47	5	5,482	341	10.64	6.22
Cotton goods,		136	27	65,546	11,054	19.85	16.86
Food preparations,		74	31	3,881	501	41.89	12.91
Furniture,		47	12	2,655	618	25.53	23.28
Hosiery and knit goods,		11	1	2,333	30	9.09	1.29
Leather,		96	19	4,578	573	19.79	12.52
Liquors: malt, distilled, and fermente	ed,	23	10	641	206	43.48	32.14
Machines and machinery,		84	5	11,060	157	5.95	1.42
Metals and metallic goods,		122	14	12,974	783	11.48	6.04
Mixed textiles,		11	1	959	125	9.09	13.03
Musical instruments and materials,		23	6	2,264	684	26.09	30.21
Paper and paper goods,		68	10	6,950	798	14.71	11.48
Rubber and elastic goods,		20	3	6,221	312	15.00	5.02
Shipbuilding,		6	2	421	146	33.33	34.68
Silk and silk goods,		7	1	2,273	458	14.29	20.15
Stone,		19	2	1,228	101	10.53	8.22
Tallow, candles, soap, and grease,		13	2	478	93	15.38	19.46
Wooden goods,		17	5	902	300	29.41	33.26
Woollen goods,		86	16	14,119	1,868	18.60	13.23
Totals,		1,255	245	178,209	23,416	19.52	13.14

An explanation as to the manner of reading this table is given on the preceding page, and following the plan there outlined we find that in 1889, in all the industries specified, the number of establishments considered, 1,255, employed an aggre-

gate average of 178,209 persons during the year; and that 245 of these establishments, or 19.52 per cent, employed 23,416 persons, or 13.14 per cent, during the entire year.

The effect of these two tables may be more clearly shown by bringing together, into one table, the percentages for both years.

	Percentages						
Industries.	18	88	1889				
	Estab- lishments	Persons Employed	Estab- lishments	Persons Employed			
Arms and ammunition,	_	_	10.00	$\frac{1}{27.31}$			
Artisans' tools,	12.50	12.70	10.00	2			
Boots and shoes.	12.71	8.27	21.99	12.01			
Boxes (paper and wooden),	13.04	9.27	13.04	10.58			
Carpetings,	20.00	5.82	10.01	10.00			
Carriages and wagons,	10.53	7.22	21.05	15.58			
Chemical preparations (compounded),	10.00		50.00	40.00			
01 11	14.89	17.67	10.64	6.22			
Clothing,	33.09	28.47	19.85	16.86			
Flax, hemp, and jute goods,	33.33	88.24	13.00	10.00			
Food preparations,	33.78	8.28	41.89	12.91			
	21.28	14.40	25.53	23.28			
TT	21.20	14.40	9.09	$\frac{23.28}{1.29}$			
	20.83	21.68	19.79	12.52			
Leather, Liquors: malt, distilled, and fer-	20.65	21.00	10.75	1.0.0			
mantad	26.09	19.63	43.48	32.14			
mented,	10.71	10.12	5.95	1.42			
	13.93	8.20	11.48	6.04			
3.64	18.18	$\frac{3.20}{16.24}$	9.09	13.03			
Mixed textiles,	$\frac{16.16}{26.09}$	12.34	$\frac{9.05}{26.09}$	30.21			
	$\frac{26.09}{26.47}$	$\frac{12.34}{26.66}$	$\frac{20.03}{14.71}$	11.48			
Paper and paper goods,	20.47	20.00	14.71	11.40			
Print works, dye works, and bleach-	6.25	2.63					
eries,		$\frac{2.65}{4.17}$	15.00	$\frac{-}{5.02}$			
Rubber and elastic goods,	15.00		33.33	34.68			
Shipbuilding,	16.67	41.19	14.29	20.15			
Sirk and sirk goods,	-	_	$14.29 \\ 10.53$	8.22			
Stone,	40 15	01 17					
Tallow, candles, soap, and grease, .	46.15	34.47	$\begin{vmatrix} 15.38 \\ 29.41 \end{vmatrix}$	19.46			
Wooden goods,	11.76	10.78		33.26			
woollen goods,	36.05	$\frac{23.08}{}$	18.60	$\frac{13.23}{}$			
TOTALS,	20.52	18.67	19.52	13.14			

The tables for 1888 and 1889 on pages 211 and 212 and the one just given, require some explanation in order that their exact meaning and proper influence may be understood, and to prevent incorrect and too far-reaching applications of the results.

The superficial reader might infer that these tables indicated a much higher percentage of unemployment than do the "ranges" drawn from the comparison of the number of persons

employed at the periods of greatest and smallest employment, respectively; a little consideration, only, will show that these figures do not touch the question of unemployment at all. They are positive employment data and not negative unemployment data. They indicate, if we consider All Industries for 1889, that in 245 establishments, or 19.52 per cent of 1,255 establishments out of the whole number considered, there were 23,416 persons employed in establishments in which the same number of persons were employed each month during the year. It does not follow that the same persons were employed in each month of the year, but only the same number. Ten employes might drop out early in March and ten others take their places at the middle or near the end of March. It does not mean that 81.33 per cent of the employés in 1888, or 86.86 per cent of the employés in 1889 were unemployed; it simply means that they were employed in establishments in which there were variations in employment and consequent supplemental variations in unemployment. These variations in employment can be ascertained by considering the industry ranges drawn from the comparisons of smallest and greatest numbers of persons employed, on pages 203 to 209, and also by consulting the table showing percentages of employment and unemployment by months, for each industry, on pages 216 to 225.

We are led to this particular explicitness in dealing with the question of the unemployed, because extravagant estimates regarding the unemployed have been current for several years. Certain writers are apt to grasp and put in circulation sensational figures without accompanying them with the explanations or qualifications that are essential to their honest presentation and correct appreciation. Science, philosophy, and art have given us few rules without exceptions, and the science of statistics has covered few questions so fully as to be able to put absolutism in the stead of continued study and research.

Referring to the table of percentages on page 213 we find in Boots and Shoes that, in 1888, 12.71 per cent of the establishments employed during the entire year 8.27 per cent of the average number of persons employed during the year in this industry, and that, in 1889, 21.99 per cent of the establishments employed during the entire year 12.01 per cent of the average number of persons employed during the year. In Boxes (Paper and Wooden), 13.04 per cent of the establishments

No. 36.] ANALYSIS. ANALYSIS. employed during the entire year 9.27 per cent of the average number of persons employed during the year 1888, and 10.58 per cent of the average number employed during 1889. In the carriage and wagon industry, in 1888, 10.53 per cent of the establishments employed during the entire year 7.22 per cent of the average number of persons employed during the year, while in 1889, 21.05 per cent of the establishments employed during the entire year 15.58 per cent of the average

number of persons employed during the year.

In Clothing, 14.89 per cent of the establishments in 1888, and 10.64 per cent in 1889, employed during the entire year 17.67 per cent and 6.22 per cent, respectively, of the average number of persons employed during the year. In Food Preparations, 33.78 per cent of the establishments employed during the entire year 8.28 per cent of the average number of persons employed during the year 1888, and in 1889, 41.89 per cent of the establishments employed during the entire year 12.91 per cent of the average number of persons employed during the year in this industry. We note that in Musical Instruments and Materials the same percentage of establishments (26.09) reports the employment during the entire year of 12.34 per cent and 30.21 per cent of the average number of persons employed during the years 1888 and 1889, respectively. Considering the total for all of the industries which reported the employment of the same number of persons during the entire year, we find that 20.52 per cent of the 1,238 establishments in 1888 and 19.52 per cent of the 1,255 establishments in 1889, furnished employment for the entire year to 18.67 per cent and 13.14 per cent, respectively, of the aggregate average number of persons employed.

AGGREGATES OF PERSONS EMPLOYED - 1889: BY INDUSTRIES.

It has been customary, and, in the absence of more positive information, permissible, to ascertain the unemployment in an industry by subtracting the smallest number of persons employed at any one time during the year from the greatest number of persons employed at any one time during the year, and assuming that the difference represented the number of persons unemployed in the industry for a longer or shorter time during the year. Although this is true as far as it goes it does not present all the facts. This "range" simply indicates the difference between the smallest and the greatest number of persons employed at relative periods of employment. It is allowable to state that 9,860 persons in the boot and shoe industry were out of employment for some portion of the time during the year; but the duration of this period of unemployment cannot be determined from the range between the two periods of employment.

Two of the inquiries contained in the schedule for 1888 called for the number of persons employed at certain times during the year; one related to the period of employment of the smallest number and the other to the period of employment of the greatest number of employés. The months in which the smallest and greatest periods of employment occurred were also called for. If an establishment was closed for repairs for two weeks and during the remainder of the month ran with only one-quarter of its usual complement of help, this smallest number would be returned and placed in comparison with the greatest number employed; and this greatest number might have included, as was manifestly proper under the instructions, a largely increased number of persons, employed for a short time only, in order to meet the demands of a brisk The comparison of these two sets of figures, in this case, would show a great difference between the smallest and greatest number of employés; we have been obliged to accept

	Industries, etc.		PERCENTAGES OF PERSONS EMPLOYED AND UNEMPLOYED DURING —				
			January	February	March	April	
$\frac{1}{2}$	Agricultural Implements. Percentages of employment, Percentages of unemployment,.		98.80 1.20	99.70 0.30	99.85 0.15	100.00	
$\frac{3}{4}$	Arms and Ammunition. Percentages of employment, Percentages of unemployment,.		$92.47 \\ 7.53$	$94.21 \\ 5.79$	100.00	96.76 3.24	
5 6	Artisans' Tools. Percentages of employment, Percentages of unemployment,.		92.55 7.45	93.32 6.68	$92.30 \\ 7.70$	92.30 7.70	
7 8	Boots and Shoes. Percentages of employment, Percentages of unemployment,.		89.70 10.30	$92.16 \\ 7.84$	93.94 6.06	92.90 7.10	

this excess as representing the number of persons actually unemployed at some period during the year, but we have always desired to supplement this partial showing with more explicit and conclusive facts.

We were fully convinced that to show the degree of unemployment it was essential that the number of persons employed during each month should be returned, therefore the schedule of 1889 was remodelled so as to call for this information, and the result of the returns from 1,364 establishments, on this basis, is shown on pages 90 and 91. There is no way by which we can ascertain from the returns made, whether or not the persons out of employment in one establishment secured work in another. This is a feature of statistics not easy of attainment, but we can show for each industry, the aggregates of persons employed during each month of the year, and this has been presented, as before stated, on pages 90 and 91. In the following table we have reduced, for purposes of analysis, these aggregates to percentages, considering the greatest number of persons employed, during any one month, as 100 per cent, and expressing the number of persons employed during each of the other months in percentages proportionately less. The months in which the greatest percentage is shown can be readily distinguished from the others by the printing of the 100 per cent in full face type (100.00).

						1		
May	June	July	August	September	Oetober	November	December	 -
100.00	98.20 1.80	96.09 3.91	87.82 12.18	94.89 5.11	99.55 0.45	98.80 1.20	98.05 1.95	
91.84 8.16	$93.11 \\ 6.89$	90.33 9.67	96.64 3.36	98.67 1.33	$96.76 \\ 3.24$	95.66 4.34	97.28 2.72	
95.12 4.88	95.76 4.24	$92.43 \\ 7.57$	93.20 6.80	95.64 4.36	$94.61 \\ 5.39$	95.38 4.62	100.00	
$94.82 \\ 5.18$	96.60 3.40	$96.55 \\ 3.45$	100.00	99.32 0.68	99.07 0.93	91.49 8.51	87.61 12.39	,

			PERCEN	TAGES OF I	PERSONS EM	IPLOYED
	INDUSTRIES, ETC.	_	January	February	March	April
$\frac{1}{2}$	Boxes (Paper and Wooden). Percentages of employment, . Percentages of unemployment, .		$94.79 \\ 5.21$	97.40 2.60	98.45 1.55	98.05 1.95
3 4	Burial Cases, Caskets, Coffins, etc. Percentages of employment, Percentages of unemployment,.		86.67 13.33	86.67 13.33	96.67 3.33	93.33 6.67
5	Buttons and Dress Trimmings. Percentages of employment, . Percentages of unemployment, .		70.29 29.71	80.33 19.67	100.00	96.23 3.77
7 8	Carpetings. Percentages of employment, . Percentages of unemployment, .		95.55 4.45	95.46 4.54	97.40 2.60	97.59 2.41
9 10	Carriages and Wagons. Percentages of employment, . Percentages of unemployment, .		81.92 18.08	83.82 16.18	88.75 11.25	93.60 6.40
11 12	Chemical Preparations (Compounded) Percentages of employment, Percentages of unemployment,.) .	78.26 21.74	100.00	95.65 4.35	86.96 13.04
13 14	Clocks and Watches. Percentages of employment, Percentages of unemployment,.		100.00	$98.79 \\ 1.21$	99.09 0.91	98.18 1.82
15 16	Clothing. Percentages of employment, Percentages of unemployment,.		94.93 5.07	95.82 4.18	$99.48 \\ 0.52$	94.97 5.03
	Cooking, Lighting, and Heating Appa ratus.	ţ-				
17 18	Percentages of employment, . Percentages of unemployment, .		99.03 0.97	$98.54 \\ 1.46$	98.54 1.46	$98.06 \\ 1.94$
19 20	Cordage and Twine. Percentages of employment, Percentages of unemployment,.	•	83.62 16.38	90.46 9.54	94.07 5.93	$97.49 \\ 2.51$
21 22	Cotton Goods. Percentages of employment, Percentages of unemployment,.		99.46 0.54	$99.55 \\ 0.45$	98.14 1.86	99.89 0.11
23 24	Cotton, Woollen, and Other Textiles. Percentages of employment, . Percentages of unemployment,.		98.74 1.26	100.00	93.87 6.13	95.32 4.68

	PERCENTA	AGES OF PE	RSONS EMPL	OYED AND U	NEMPLOYED	During —		
May	June	July	August	September	October	November	December	
100.00	99.10 0.90	97.31 2.69	97.23 2.77	$95.20 \\ 4.80$	$98.29 \\ 1.71$	98.21 1.79	97.56 2.44	1 2
93.33 6.67	93.33 6.67	93.33 6.67	100.00	96.67 3.33	93.33 6.67	86.67 13.33	86.67 13.33	3 4
84.10 15.90	59.00 41.00	57.74 42.26	77.41 22.59	85.36 14.64	84.10 15.90	82.01 17.99	$73.22 \\ 26.78$	5 6
85.31 14.69	96.14 3.86	96.44 3.56	98.55 1.45	100.00	$98.48 \\ 1.52$	95.55 4.45	95.60 4.40	7 8
97.84 2.16	100.00	97.23 2.77	93.86 6.14	87.11 12.89	86.51 13.49	87.54 12.46	86.42 13.58	9
$65.22 \\ 34.78$	56.52 43.48	47.83 52.17	47.83 52.17	47.83 52.17	47.83 52.17	47.83 52.17	47.83 52.17	11 12
93.94 6.06	90.61 9.39	89.39 10.61	35.45 64.55	88.79 11.21	90.30 9.70	90.61 9.39	90.30 9.70	13 14
96.62 3.38	97.91 2.09	88.02 11.98	89.08 10.92	96.36 3.64	100.00	98.64 1.36	91.33 8.67	15 16
98.54 1.46	99.03 0.97	100.00	93.69 6.31	91.75 8.25	$91.26 \\ 8.74$	94.17 5.83	96.60 3.40	17 18
$99.48 \\ 0.52$	100.00	92.55 7.45	67.83 32.17	63.99 36.01	72.47 27.53	77.14 22.86	85.91 14.09	19 20
100.00	99.90 0.10	99.50 0.50	99.36 0.64	99.29 0.71	99.51 0.49	99.72 0.28	99.65 0.35	21 22
$90.41 \\ 9.59$	89.99 10.01	89.99 10.01	91.81 8.19	94.06 5.94	93.08 6.92	88.59 11.41	94.76 5.24	23 24

	INDUSTRIES, ETC.	-	Percent And	rages of I Unemplo	ersons Ex	IPLOYED G —
	INDUSTRIES, ETC.		January	February	March	April
$\frac{1}{2}$	Dyestuffs. Percentages of employment, Percentages of unemployment,.	:	100.00	100.00	100.00 -	100.00
3 4	Emery and Sand Paper and Cloth, e. Percentages of employment, . Percentages of unemployment, .	tc.	70.27 29.73	70.27 29.73	67.57 32.43	71.62 28.38
5 6	Fertilizers. Percentages of employment, . Percentages of unemployment, .	:	15.00 85.00	15.00 85.00	15.00 85.00	15.00 85.00
7 8	Flax, Hemp, and Jute Goods. Percentages of employment, Percentages of unemployment,.	:	77.50 22.50	75.65 24.35	77.50 22.50	87.39 12.61
9 10	Food Preparations. Percentages of employment, Percentages of unemployment,	:	86.06 13.94	87.99 12.01	88.03 11.97	83.97 16.03
11 12	Furniture. Percentages of employment, Percentages of unemployment,	:	93.65 6.35	95.78 4.22	97.98 2.02	98.16 1.84
13 14	Glass. Percentages of employment, . Percentages of unemployment, .	:	82.13 17.87	92.59 7.41	98.48 1.52	99.43 0.57
15 16	Hose: Rubber, Linen, etc. Percentages of employment, Percentages of unemployment,.	•	92.78 7.22	94.44 5.56	100.00	94.44 5.56
17 18	Hosiery and Knit Goods. Percentages of employment, Percentages of unemployment,.		92.72 7.28	93.61 6.39	95.44 4.56	90.76 9.24
19 20	Leather. Percentages of employment, Percentages of unemployment,	:	95.46 4.54	98.63 1.37	100.00	98.10 1.90
21 22	Linen. Percentages of employment, . Percentages of unemployment, .		100.00	99.26 0.74	98.40 1.60	98.51 1.49
23 24	Liquors: Malt, Distilled, and Ferment Percentages of employment, . Percentages of unemployment, .	ed.	94.49 5.51	91.52 8.48	94.35 5.65	94.20 5.80

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	PERCENTA	GES OF PEI	RSONS EMPL	OYED AND U	NEMPLOYED	DURING -		
May	June	July	August	September	October	November	December	
100.00	96.67 3.33	93.33 6.67	93.33 6.67	93.33 6.67	96.67 3.33	96.67 3.33	93.33 6.67	1 2
72.97 27.03	72.97 27.03	74.32 25.68	77.03 22.97	83.78 16.22	82.43 17.57	93.24 6.76	100.00	3 4
15.00 85.00	15.00 85.00	$5.00 \\ 95.00$	5.00 95.00	100.00	100.00	15.00 85.00	15.00 85.00	5 6
93.70 6.30	97.96 2.04	98.64 1.36	100.00	96.99 3.01	$90.49 \\ 9.51$	86.03 13.97	84.19 15.81	7 8
85.57 14.43	86.44 13.56	90.08	$90.76 \\ 9.24$	96.69 3.31	100.00	98.71 1.29	96.12 3.88	9 10
98.34 1.66	$95.60 \\ 4.40$	89.90	87.62 12.38	94.98 5.02	99.39 0.61	100.00	95.13 4.87	11 12
$93.16 \\ 6.84$	87.26 12.74	69.77 30.23	71.29 28.71	99.43 0.57	100.00	96.77 3.23	95.82 4.18	13 14
91.67 8.33	77.78 22.22	69.44 30.56	72.22 27.78	61.11 38.89	66.67 33.33	72.22 27.78	77.78 22.22	15 16
$\frac{96.14}{3.86}$	99.02 0.98	93.17 6.83	90.56 9.44	95.40 4.60	94.96 5.04	100.00	98.78 1.22	17 18
$97.76 \\ 2.24$	98.31 1.69	94.62 5.38	96.35 3.65	93.69 6.31	90.99 9.01	91.45 8.55	84.13 15.87	19 20
$96.49 \\ 3.51$	93.83 6.17	94.57 5.43	94.47 5.53	92.98 7.02	92.02 7.98	93.83 6.17	92.87 7.13	21 22
95.09 4.91	93.90 6.10	92.56 7.44	94.20 5.80	94.64 5.36	100.00	99.26 0.74	94.20 5.80	28 24

-	INDICADLES PTO	PERCEN	TAGES OF I	Persons Er	MPLOYED
	Industries, etc.	January	February	March	April
1 2	Lumber. Percentages of employment, Percentages of unemployment,	68.75 31.25	75.00 25.00	100.00	100.00
3 4	Machines and Machinery. Percentages of employment, Percentages of unemployment,	98.70 1.30	98.51 1.49	99.33 0.67	96.91 3.09
5	Metals and Metallic Goods. Percentages of employment, Percentages of unemployment,	92.83 7.17	92.59 7.41	92.29 7.71	91.58 8.42
7 8	Mixed Textiles. Percentages of employment, Percentages of unemployment,	92.63 7.37	92.93 7.07	$96.26 \\ 3.74$	96.26 3.74
9 10	Musical Instruments and Materials. Percentages of employment, Percentages of unemployment,	92.78 7.22	93.03 6.97	93.32 6.68	92.86 7.14
11 12	Oils and Illuminating Fluids. Percentages of employment, Percentages of unemployment,	100.00	100.00	93.18 6.82	86.64 13.36
13 14	Paper and Paper Goods. Percentages of employment, Percentages of unemployment,	98.77 1.23	98.77 1.23	98.41 1.59	99.13 0.87
15 16	Print Works, Dye Works, and Bleacheries. Percentages of employment, Percentages of unemployment,	100.00	97.68 2.32	94.10 5.90	94.95 5.05
17 18	Railroad Construction and Equipment. Percentages of employment, Percentages of unemployment,	88.68 11.32	100.00	98.11 1.89	88.68 11.32
19 20	Rubber and Elastic Goods. Percentages of employment, Percentages of unemployment,	98.97 1.03	97.65 2.35	96.86 3.14	82.87 17.13
21 22	Shipbuilding. Percentages of employment, Percentages of unemployment,	73.67 26.33	100.00	64.77 35.23	63.70 36.30
23 24	Silk and Silk Goods. Percentages of employment, Percentages of unemployment,	97.71 2.29	99.52 0.48	99.65 0.35	100.00

		DURING -	NEMPLOYED	OYED AND U	RSONS EMPL	AGES OF PE	Percent	
r	December	November	October	September	August	July	June	Мау
	62.50 37.50	62.50 37.50	68.75 31.25	31.25 68.75	$\frac{43.75}{56.25}$	31.25 68.75	93.75 6.25	100.00
	99.87 0.13	100.00	99.77 0.23	98.89 1.11	$98.96 \\ 1.04$	98.41 1.59	98.10 1.90	97.96 2.04
-	100.00	99.88 0.12	99.64 0.36	96.75 3.25	$92.08 \\ 7.92$	90.92 9.08	$92.21 \\ 7.79$	$90.45 \\ 9.55$
9	100.00	98.28 1.72	$\frac{96.06}{3.94}$	$\begin{array}{c} 95.76 \\ 4.24 \end{array}$	$96.46 \\ 3.54$	95.86 4.14	$94.65 \\ 5.85$	$97.47 \\ 2.53$
- 10	100.00	97.80 2.20	95.52 4.48	94.40 5.60	93.65 6.35	91.82 8.18	91.82 8.18	$91.37 \\ 8.63$
	88.64 11.36	86.36 13.64	84.09 15.91	72.73 27.27	52.27 47.73	52.27 47.73	56.82 43.18	72.73 27.27
	98.16 1.84	98.04 1.96	98.68 1.32	98.74 1.26	97.80 2.20	99.01 0.99	100.00	98.54 1.46
	96.40 3.60	94.41 5.59	91.96 8.04	93.97 6.03	93.12 6.88	88.31 11.69	88.31 11.69	91.62 8.38
	75.47 24.58	81.13 18.87	$83.02 \\ 16.98$	71.70 28.30	81.13 18.87	81.13 18.87	79.25 20.75	81.13 18.87
	97.53 2.47	100.00	97.04 2.96	$94.36 \\ 5.64$	91.85 8.15	91.50 8.50	$92.41 \\ 7.59$	89.44 10.56
	58.54 41.46	63.52 36.48	$\frac{85.94}{14.06}$	$62.28 \\ 37.72$	69.40 30.60	82.92 17.08	85.94 14.06	87.90 12.10
	98.53 1.47	97.66 2.34	97.49 2.51	96.97 3.03	$96.15 \\ 3.85$	97.10 2.90	99.70 0.30	99.22 0.78

				Persons Ex	
	Industries, etc.	January	February	March	April
	_				
	Stone.				
$\frac{1}{2}$	Percentages of employment, Percentages of unemployment,	95.32 4.68	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	85.35 14.65	$91.23 \\ 8.77$
ک	referentages of unemployment,	4.00	22.00	14.00	0.11
	Straw and Palm Leaf Goods.				
3	Percentages of employment,	91.03	100.00	97.61	87.63
4	Percentages of unemployment,	8.97	_	2.39	12.37
	Tallow, Candles, Soap, and Grease.				
5	Percentages of employment,	87.06	86.27	92.75	90.00
6	Percentages of unemployment,	12.94	13.73	7.25	10.00
	TTT : T				
_	Whips, Lashes, and Stocks.	07.00	07.00	07.00	00
$\frac{7}{8}$	Percentages of employment, Percentages of unemployment,	$97.06 \\ 2.94$	97.06 2.94	$97.06 \\ 2.94$	95.59 4.41
0	referringes of unemployment,.	2.01	2.01	2.01	1.11
	$Wooden\ Goods.$				
9	Percentages of employment,	87.33	91.87	94.30	95.25
10	Percentages of unemployment,	12.67	8.13	5.70	4.75
	$Woollen\ Goods.$				
11	Percentages of employment,	97.36	98.40	100.00	99.72
12	Percentages of unemployment,	2.64	1.60	-	0.28
	W				
10	Worsted Goods.	00.00	00.00	00.04	05 50
13 14	Percentages of employment, Percentages of unemployment,	96.83	96.39 3.61	$96.34 \\ 3.66$	$95.50 \\ 4.50$
	rotechtages of anomproyment,.		0.01	0.00	1.00
	ALL Industries.				
		00.51	00.04	00 51	00.00
15 16	Percentages of employment, Percentages of unemployment,	98.51 1.49	$99.36 \\ 0.64$	$99.51 \\ 0.49$	$98.98 \\ 1.02$
10	recentages of anempoyment,.	1.10	0.04	0.40	1.02

From this table we learn that the periods of employment of smallest number in one industry co-ordinate with the periods of employment of greatest number in another industry so that when all the industries are considered the variation in the total number of persons employed is in no case very marked. This would naturally be the result when so many establishments are considered in which the busy and dull seasons vary according to the industry, and the decreased employment in one month is counterbalanced by the increased employment in another month. Thus while the month of October, in the line for All Industries, shows the greatest percentage of employ-

		DURING -	NEMPLOYED	OYED AND U	ERSONS EMPI	AGES OF PI	PERCENT	
er	December	November	October	September	August	July	June	May
	79.70 20.30	89.14 10.86	97.10 2.90	100.00	99.18 0.82	99.33 0.67	99.03 0.97	97.62 2.38
	65.65 34.35	50.29 49.71	36.24 63.76	25.04 74.96	18.08 81.92	12.44 87.56	31.29 68.71	73.68 26.32
	93.92 6.08	99.41 0.59	$92.94 \\ 7.06$	92.16 7.84	100.00	94.71 5.29	$99.22 \\ 0.78$	90.98 9.02
	94.12 5.88	98.53 1.47	$98.53 \\ 1.47$	100.00	92.65 7.35	94.12 5.88	$98.53 \\ 1.47$	97.06 2.94
	96.09 3.91	99.37 0.63	100.00	95.35 4.65	98.84 1.16	96.62 3.38	94.61 5.39	93.35 6.65
	97.91 2.09	97.39 2.61	96.65 3.35	95.64 4.36	$97.74 \\ 2.26$	97.34 2.66	97.64 2.36	98.31 1.69
	99.60 0.40	100.00	98.90 1.10	97.14 2.86	97.63 2.37	95.10 4.90	93.54 6.46	$95.50 \\ 4.50$
	98.46 1.54	99.24 0.76	100.00	99.07 0.93	98.26 1.74	97.78 2.22	99.04 0.96	99.03 0.97

ment, the variation from 100 per cent is in no case seen to be much more than two per cent. The variations in the percentages of unemployment range from 0.49 per cent in March to 2.22 per cent in July. We must examine the industry lines if we wish to see the variations distinctly outlined.

In the boot and shoe industry we find that, upon the basis of percentages, the greatest aggregate number of persons employed, 100 per cent, was during the month of August. The largest variation from this is seen in December where the percentage of unemployment is 12.39. The smallest percentage of unemployment is found in September, this percentage

being 0.68. It would seem that the dull season occurred in December, the percentage of employment being 87.61; this rose in graduated amounts, coincident with the usual improvement in business, to 89.70 per cent in January, 92.16 per cent in February, 93.94 per cent in March, 92.90 per cent in April, 94.82 per cent in May, 96.60 per cent in June, 96.55 per cent in July, and reached its limit, 100 per cent, in August. From this point the percentage of employment begins to fall indicating, presumably, the approach of the dull season; the percentages being 99.32 in September, 99.07 in October, 91.49 in November, and 87.61 in December.

We think that no better method than this can be adopted for showing the fluctuations in employment. The presentation is complete, and conclusions based upon these figures may be safely considered as reliable. We wish to say, however, regarding the fluctuations in employment as shown in any of the industries that whenever a large percentage of unemployment is shown in any month in any industry, it must not be taken for granted that the persons represented were out of employment the entire month. The period of unemployment may have been much less, for few establishments cease operations for so long a time, and many manufacturers in replying to the schedule of inquiries, volunteered the information that the periods of apparent idleness were of but brief duration. it will be seen that it is not safe to assume that the range of unemployment is either extremely large or small, or that it is increasing each year. In the analysis tables on pages 207 and 208 we show very plainly that despite the increase in the number of establishments considered, or the increase in the number of employés at the periods of employment of the smallest and of the greatest number, the percentage of excess between these two periods remains almost stationary.

Returning again to the consideration of the boot and shoe industry and referring to the presentation under "Smallest and Greatest Number of Persons Employed: By Industries," on page 69, we find that the smallest number of persons employed, at any one time during the year 1889, was 24,082, and the greatest number of persons employed at any one time during the year 1889, was 33,942. The difference, or excess, in the number of employes between the two periods was 9,860. If we examine

the presentation on pages 90 and 91 which shows the aggregate number of persons employed during each month, in this industry, without regard to the definite periods of employment, we find the greatest number of persons employed in the month of August, this being the month when the percentage of employment was 100, and the aggregate of employés to be 30,628. The smallest number of persons employed, 26,832, we find in December, the month in which the percentage of unemployment was greatest, or 12.39. The range between the smallest and greatest number as shown in this table was 3,796, as against 9,860 shown on page 69.

The reason for this difference in range is obvious. The ranges are drawn from two different bases, that of the first (page 69) being the periods of employment of the smallest and of the greatest number without regard to the months in which they are employed, while the second (pages 90 and 91) represents the actual number of persons employed during each month without regard to the fact as to whether or not the largest or the smallest number was employed during the month. The variations in the range do not disprove the fact that 9,860 persons were unemployed at some period or other during the year for a greater or less period of time, but they limit the period of unemployment and indicate that it was comparatively brief, for in no case could it have extended over the entire month in any of the industries considered, with the exception of Agricultural Implements and Straw and Palm Leaf Goods, in which industries certain establishments were closed for a period of time exceeding one month.

Turning now to Carpetings we find that in September the largest number of persons, or 100 per cent, were employed. The smallest percentage of employment is seen in May, in which the extent of unemployment reached 14.69 per cent. The percentages of unemployment shown in the other months range from 1.45 per cent in August to 4.54 per cent in February. Referring to page 69 we find that the smallest number of persons employed at any one time during the year was 3,478, and the greatest number of persons employed at any one time during the year was 4,325, a range of 847 persons. In the month of May, in which has been noted the largest percentage of unemployment, we find that the aggregate of all persons employed

during the month, as shown on pages 90 and 91, was 3,646, and in September, in which was seen the largest percentage of employment, we find an aggregate of 4,274, a range between the two months of 628 persons; consequently the period of unemployment of a portion of the 847 persons must have been of brief duration.

We have previously stated in this Analysis, that employment was very uniform in the cotton goods industry. We find the percentage of employment for May to be 100; the variation from this is very slight, not exceeding one per cent in any month, except in March where the percentage of unemployment is 1.86. Unemployment in the other months ranges from 0.10 per cent in June to 0.71 per cent in September. smallest and greatest number of persons employed at any one time during the year, as shown on page 69, were 61,596 and 68,086, respectively, the excess of greatest over smallest number being 6,490. The aggregate number of employés in March, when the largest percentage of unemployment is shown, was 64,523, and in May, when employment reached 100 per cent, the number of persons employed was 65,748, the excess being 1,225. This indicates that the period of unemployment of the greater part of the 6,490 persons must have been of short duration.

March was the month in the leather industry when the greatest percentage of employment is seen, and with the exception of the month of December employment was comparatively uniform. The percentage of unemployment ranged from 15.87 per cent in December to 1.37 per cent in February. The number of persons employed at the periods of employment of the smallest number was 3,609, and at the periods of employment of the greatest number 5,356, a range of 1,747. The aggregate number of persons employed during the month of December, during which the percentage of employment was 84.13, was 3,986; in the month of March when the percentage of employment was 100, the number of persons employed was 4,738, showing a range between the two months of 752, which indicates that the period of unemployment of a portion of the 1,747 persons was not one month in length.

The percentage of employment for December, in Metals and Metallic Goods, reaches 100. The percentages of unemploy-

ment from this month on are very uniform being 7.17 in January, 7.41 in February, 7.71 in March, 8.42 in April, 9.55 in May, 7.79 in June, 9.08 in July, and 7.92 in August. A better condition now begins to prevail, the percentages of unemployment being only 3.25 in September, 0.36 in October, and 0.12 in November. The number of persons employed at the periods of employment of the smallest number, as shown on page 69, is 11.396, and at the periods of employment of the greatest number 14,421, an excess of largest over smallest number of 3,025. May is the month, in the table on pages 90 and 91, which shows the smallest aggregate of persons employed, the number being 12,394; the largest aggregate number is shown in December, 13,702; a range of 1,308 between the two months. This difference in the two ranges indicates that the 3,025 persons could not have been out of employment for any extended period of time.

In Woollen Goods we find that the percentage of employment is highest in March. The extent of unemployment does not exceed four per cent except in September, when it reaches 4.36 per cent. In the other months, we find unemployment ranging from 0.28 per cent in April to 3.35 per cent in October. Referring to page 69, we learn that the number of persons employed at the periods of employment of the smallest number was 12,751, and at the periods of employment of the greatest number, 15,013. The range between the smallest and greatest number was 2,262. As is noted in the table on pages 224 and 225 the largest percentage of unemployment was in September; during this month 13,719 persons were employed; and in the month of March 14,344 persons were employed, showing a range between the two months of but 625 persons. The figures given show a considerable uniformity of employment and indicate that the period of unemployment was of but brief duration.

When we consider Worsted Goods we find that, so far as the percentage of employment indicates seasons, the busy season was in November, the largest number of persons being reported in that month. Unemployment did not exceed five per cent except in June, when it reached 6.46 per cent. We find that the employment of labor was fairly uniform, never falling below 93 per cent. The number of persons employed at the

periods of employment of the smallest number, as shown on page 69, was 3,102, and at the periods of employment of the greatest number, 3,616, an excess of 514. In June we find 93.54 per cent of the persons employed, or an aggregate number of 3,243, and in November we find the greatest number employed during any month, that is 100 per cent; the aggregate being 3,467. These figures show a range between the two months of 224 persons, indicating that in but few instances did the time of unemployment exceed one month.

If we obtain an average of the actual number of persons employed during each month by dividing the aggregate number of persons employed by the total number of establishments, we secure the following table:

	Months.								Aggregate Number of Per- sons Employed During the Month Specified	Average Number of Persons Employed in each Establishment During the Month Specified
January,									199,353	146
February,	:	Ċ		Ċ					201,067	147
March.	:	Ċ	Ċ		·	·			201,382	148
April, .	:	•	Ċ		Ċ	:	·	į	200,297	147
May,	:	•	Ċ	·	Ċ			·	200,399	147
June, .	:	•	·	·	•			·	200,424	147
July, .	:	•	Ċ		•	Ċ	Ċ	·	197,883	145
August,	•	•			•	·		Ċ	198,853	146
September,	•	•	•	•	·		·		200,482	147
October,	•	•	•	•	•		·	·	202,370	148
November,	•	•	•	•	•			Ċ	200,841	147
December,			:	:	:	:		:	199,261	146

We note that the average number of persons employed in each establishment, as shown on page 71, is 147. From the above table we find that this average applies to the months of February, April, May, June, September, and November. In one month, July, it is 145; in three months, January, August, and December, it is 146; and in two months, March and October, it reaches 148. This average bears out our statement on page 224 that, considering all the industries as a whole, the number of persons employed is practically the same throughout the year, and that the range of unemployment is, with the exception of a few-establishments in certain industries, limited to a short space of time.

PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

The presentations on pages 95 to 126, shown under the above heading, are reviewed in two divisions. First, the proportion of business done; that is, the proportion that the business of the year bore to the greatest capacity for production in the establishments considered. This greatest capacity is the amount of goods that could be turned out with the present plant and facilities and the greatest number of employés for whom accommodations could be supplied without increase of plant; therefore, greatest capacity has been considered as 100 per cent. The second section relates to the time in operation: 306 days, omitting 52 Sundays and seven holidays, has been considered as representing a full year, or 51 weeks. But in a number of instances establishments running 313 days or more have been counted as running 52 weeks. To these divisions have been added two comparisons for All Industries which show the percentages of business done, and the weeks in operation compared with these percentages, and the number of weeks in operation, with percentages of business done compared with the weeks. Comprehensive recapitulations accompany each table.

Proportion of Business Done: By Industries.

In the first recapitulation on page 102 all of the establishments contained in the 47 industries considered are brought forward so as to compare the average proportion of business done for the year 1889 with that of 1888. Consulting the line for All Industries we find that in 1888 the average proportion of business done for all establishments considered was 77.52 per cent, and in 1889 for the same establishments was 76.74 per cent. In no case did all the establishments in any industry run to their greatest capacity; the nearest approach is found in Cotton Goods, where the average proportion of business done was 93.18 per cent in 1889 and 95.45 per cent in 1888. Other industries in 1889 which show an average proportion of business done of more than 90 per cent are Silk and Silk Goods, 90.29 per cent, and Woollen Goods, 91.37 per cent. Emery and Sand Paper and Cloth, etc., and Flax, Hemp, and Jute Goods, exhibit an average proportion of exactly 90 per cent.

In the following industries the range is 80 but under 90 per cent: Artisans' Tools, 80.75 per cent; Carpetings, 89 per cent; Cotton, Woollen, and Other Textiles, 87.50 per cent; Linen, 80.67 per cent; Mixed Textiles, 80.55 per cent; Paper and Paper Goods, 89.59 per cent; Print Works, Dye Works, and Bleacheries, 81 per cent; and Worsted Goods, 84.50 per cent.

In the following industries the range is 70 per cent but under 80 per cent: Agricultural Implements, 77.61 per cent; Boots and Shoes, 71.53 per cent; Boxes (Paper and Wooden), 76.30 per cent; Burial Cases, Caskets, Coffins, etc., 75 per cent; Carriages and Wagons, 78.42 per cent; Clocks and Watches, 73.50 per cent; Clothing, 76.13 per cent; Cordage and Twine, 77 per cent; Fürniture, 73.85 per cent; Glass, 78 per cent; Hose: Rubber, Linen, etc., 75 per cent; Hosiery and Knit Goods, 70.73 per cent; Leather, 71.55 per cent; Lumber, 75 per cent; Machines and Machinery, 74.89 per cent; Metals and Metallic Goods, 72.29 per cent; Musical Instruments and Materials, 78.65 per cent; Oils and Illuminating Fluids, 75 per cent; Railroad Construction and Equipment, 75 per cent; Rubber and Elastic Goods, 76.05 per cent; Tallow, Candles, Soap, and Grease, 79.92 per cent; Whips, Lashes, and Stocks, 70 per cent; and Wooden Goods, 71.18 per cent.

The following industries show a range in proportion of business done between 60 and 70 per cent: Cooking, Lighting, and Heating Apparatus, 60 per cent; Food Preparations, 68.34 per cent; Shipbuilding, 65.33 per cent; Stone, 64.21 per cent; and Straw and Palm Leaf Goods, 68.88 per cent.

A range between 50 and 60 per cent is shown in the following industries: Arms and Ammunition, 54.50 per cent; Buttons and Dress Trimmings, 53.25 per cent; Chemical Preparations (Compounded), 50 per cent; Dyestuffs, 50 per cent; and Liquors: Malt, Distilled, and Fermented, 59.78 per cent. In only one industry, that of Fertilizers, does the average proportion of business done fall below 50 per cent, the average reported for this industry for the year 1889 being only 20 per cent.

Turning now to the detailed presentation of proportion of business done, by industries, pages 95 to 101, and selecting those industries in which a certain number of establishments are reported as running to full capacity, or 100 per cent, we secure the following table:

	1	888	1	889
Industries.	Total Number of Estab- lishments Con- sidered	Number of Establish- ments running to Full Capacity (100 per cent)	Total Number of Estab- lishments Con- sidered	Number of Establish- ments running to Full Capacity (100 per cent)
Boots and shoes, Boxes (paper and wooden), Carpetings, Carriages and wagons, Clothing, Cordage and twine, Cotton goods, Gotton, woollen, and other textiles, Emery and sand paper and cloth, etc., Flax, hemp, and jute goods, Food preparations, Furniture, Glass, Hosiery and knit goods, Leather, Linen, Liquors: malt, distilled, and fermented, Machines and machinery, Metals and metallic goods, Mixed textiles, Musical instruments and materials, Paper and paper goods, Print works, dye works, and bleacheries, Rubber and elastic goods, Shipbuilding, Silk and silk goods, Stone, Straw and palm leaf goods, Tallow, candles, soap, and grease, Wooden goods, Worsted goods, Worsted goods, Worsted goods, Worsted goods, Worsted goods, Worsted goods,	291 23 5 19 47 12 136 2 - 3 74 47 5 11 96 3 23 84 122 11 23 68 16 20 6 7 19 16 13 17 86 16 16 16 16 16 16 16 16 16 16 16 16 16	28 3 1 5 11 4 85 1 12 2 3 1 18 1 18 1 2 13 14 5 5 5 4 4 5 5 6 1 1 2 3 5 6 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8	291 233 5 19 47 12 136 2 2 3 74 47 - 11 96 - 23 84 122 11 23 68 16 20 6 7 7 19 19 19 19 19 19 19 19 19 19 19 19 19	25 3 1 6 6 6 2 73 1 1 2 6 2 - 1 15 8 5 4 27 3 1 2 2 3 3 1 2 3 3 3 4 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 4 5 5 6 8 8 8 8 8 8 8 8 8 8 8 8 8
TOTALS,	1,321	325	1,315	279

The total number of establishments considered in the whole 47 industries is 1,364; in the 32 industries, above presented, they number, in 1888, 1,321, and, in 1889, 1,315; 325 establishments, in 1888, reported that they ran to full capacity, and 279 establishments reported to the same effect in 1889. Con sidering all establishments running to full capacity with the total number of establishments in all the industries, we secure the following table:

· Classification.		NUMBER O		Percentages	
CHASSIFICATION		1888	1889	1888	1889
Full capacity (100 per cent), . Less than full capacity,	:	325 1,039	279 1,085	23.83 76.17	20.45 79.55
Totals,		1,364	1,364	100.00	100.00

This table shows that 325, or 23.83 per cent, of the establishments turned out goods to the fullest extent of capacity in 1888, and 279 establishments, or 20.45 per cent, reported in 1889, that their output could not have been increased. In 1888, 76.17 per cent, and in 1889, 79.55 per cent, of the establishments turned out less than their full production. The difference between 1888 and 1889 in the number of establishments running to full capacity was 46, or 14.11 per cent.

In the recapitulation upon pages 118 and 119 we find the number of establishments which reported a definite proportion of business done for the years 1888 and 1889. We note that 121 establishments, in the latter year, ran to within 50 per cent of their possible production, against 135 establishments in 1888; 248 establishments accomplished 75 per cent of their possible output in 1889 against 201 establishments in 1888. The number running to full capacity (100 per cent) has already been given. We have classified the percentages, as given in this recapitulation, and present the following table:

Classification of Percentages.				Percentages	
AGES.		1888	1889	1888	1889
•		1	1	0.07	0.07
		5	7	0.37	0.51
		21	27	1.54	1.98
		32	30	2.34	2.20
		18	25	1.32	1.83
		147	137	10.78	10.04
		185	157	13.56	11.51
		265	326	19.43	23.90
			168	13.05	12.32
			207	13.71	15.18
		325	279	23.83	20.46
		1,364	1,364	100.00	100.00
				1888 1889	LISHMENTS 1889 1888 1889 1888 1889 1888

Outside of the establishments running to full capacity, the greatest condensation in proportion of business done appears at the line 70 but under 80 per cent in both years; it is also apparent that the majority of the establishments ran from 70 per cent up to full capacity.

We next present a table based upon the recapitulation on page 102 in which the industries take the place of the establishments.

Classification of Percentages.			NUMBER O TRI		Percentages	
			1888	1889	1888	1889
20 but under 30 per cent,			_	1	_	2.13
30 but under 40 per cent,			-	-	_	_
40 but under 50 per cent,			1	_	2.13	_
50 but under 60 per cent,		.	2	5	4.25	10.64
60 but under 70 per cent,		.	9	5	19.15	10.64
70 but under 80 per cent,			22	23	46.81	48.93
80 but under 90 per cent,			6	8	12.77	17.02
90 but under 100 per cent,			7	5	14.89	10.64
100 per cent,			-	-	-	-
Totals,			47	47	100.00	100.00

The same conditions obtain in this table; 22 industries, or 46.81 per cent, in 1888, and 23 industries, or 48.93 per cent, in 1889 reporting their proportion of business done between 70 and 80 per cent.

We next present tables for a few of the principal industries showing the number of establishments by classification of percentages; the first to be considered is Boots and Shoes.

Classification of Percentages			NUMBER OF ESTAB- LISHMENTS		Percentages		
				1889	1888	1889	
5 but under 10 per cent,			_	_	-	_	
10 but under 20 per cent,			-	4	_	1.37	
20 but under 30 per cent,			6	5	2,06	1.75	
30 but under 40 per cent,			7	6	2,41	2.0	
40 but under 50 per cent,			4	9	1,37	3.09	
50 but under 60 per cent,			44	30	15.12	10.3	
60 but under 70 per cent,			59	54	20.28	18.5	
70 but under 80 per cent,	Ċ		80	87	27.49	29.9	
80 but under 90 per cent,	•		35	36	12.03	12.3	
90 but under 100 per cent,	:		28	35	9.62	12.0	
00 per cent,	:		28	25	9.62	8.5	
Totals,			291	291	100.00	100.0	

From this table we see that the greatest condensation comes opposite the lines 60 but under 70 per cent, and 70 but under 80 per cent in both 1888 and 1889, and it is safe to assume that the average proportion of business done in this industry is 60 per cent or over, but under 80 per cent.

We present a similar table for Cotton Goods.

Classification of Percentages.			Number of Estab- LISHMENTS		Perce	Percentages	
			1888	1889	1888	1889	
5 but under 10 per cent,			_	_	_	_	
10 but under 20 per cent,			-	-	_	_	
20 but under 30 per cent,			_	1	_	0.73	
30 but under 40 per cent,		.	_	-	_	_	
40 but under 50 per cent,		.	_	1	_	0.73	
50 but under 60 per cent,		.	1	3	0.73	2.21	
60 but under 70 per cent.		.	1	1	0.73	0.73	
70 but under 80 per cent,			7	7	5.15	5.15	
80 but under 90 per cent,		.	10	13	7.36	9.56	
90 but under 100 per cent,			32	37	23.53	27.21	
100 per cent,		.	85	73	62.50	53.68	
TOTALS,			136	136	100.00	100.00	

The range in this industry is from 20 to 100 per cent, although the largest aggregation of establishments is found against the line 100 per cent, or full capacity, indicating that the majority of the mills engaged in the manufacture of cotton goods were turning out product to their utmost limit.

A similar table for the leather industry follows:

Classification of Percentages.			Number o	F ESTAB- ENTS	Percentages	
			1888	1889	1888	1889
5 but under 10 per cent,			1	_	1.04	_
10 but under 20 per cent,			- 1	1	_	1.04
20 but under 30 per cent,			_	4	_	4.17
30 but under 40 per cent,			1	2	1.04	2.08
40 but under 50 per cent,		.	4	3	4.17	3.12
50 but under 60 per cent,		.	17	11	17.71	11.40
60 but under 70 per cent,			14	15	14.58	15.63
70 but under 80 per cent,			17	26	17.71	27.08
80 but under 90 per cent,		.	17	8	17.71	8.3
90 but under 100 per cent,		.	7	10	7.29	10.42
00 per cent,			18	16	18.75	16.67
TOTALS,			96	96	100.00	100.00

It will be seen that business, in this industry, was not so progressive in 1889 as in the previous year; 86 establishments or 89.58 per cent report their proportion of business done as ranging between 50 and 100 per cent in 1889, while 90 establishments or 93.75 per cent so report in 1888.

A table for Metals and Metallic Goods follows:

CLASSIFICATION OF PERCENTA	Classification of Percentages.				Percentages	
			1888	1889	1888	1889
5 but under 10 per cent,			_	_	_	_
10 but under 20 per cent,			-	-	_	_
20 but under 30 per cent,		.	3	3	2.46	2.46
30 but under 40 per cent,		.	7	3	5.74	2.46
40 but under 50 per cent,			2	1	1.64	0.82
50 but under 60 per cent,		`. l	11	17	9.02	13.94
60 but under 70 per cent,			22	19	18.03	15.57
70 but under 80 per cent,			22	32	18.03	26.23
80 but under 90 per cent,	Ċ		23	21	18.85	17.21
90 but under 100 per cent,		.	18	$\tilde{18}$	14.75	14.75
	•	•	14	8	11.48	6.56
100 per cent,	•		1.4	0	11.40	0.50
TOTALS,			122	122	100.00	100.00

In 1888, 22 establishments, or 18.03 per cent, reported that their proportion of business done ranged between 60 and 70 per cent, and the same number is seen at the line 70 to 80 per cent; while, in 1889, we find that 32 establishments, or 26.23 per cent, report that they produced between 70 and 80 per cent of their greatest capacity.

The last industry presentation is for Woollen Goods.

Classification of Percentages.			NUMBER OF ESTAB- LISHMENTS		Percentages	
			1888 1889		1888	1889
5 but under 10 per cent,			_	_		_
10 but under 20 per cent,			-	-	_	_
20 but under 30 per cent,			-	-		-
30 but under 40 per cent,		.	_	_	_	-
40 but under 50 per cent,			1	-	1.16	-
50 but under 60 per cent,			4	5	4.65	5.81
60 but under 70 per cent,			3	2	3.49	2.33
70 but under 80 per cent,		.	5	4	5.82	4.65
80 but under 90 per cent,			11	12	12.79	13.95
90 but under 100 per cent,		.	11	13	12.79	15.12
00 per cent,			51	50	59.30	58.14
TOTALS,			86	86	100.00	100.00

This industry, like Cotton Goods, judged by this showing, was turning out nearly all the product of which the establishments were capable, 51 establishments, or 59.30 per cent, reporting 100 per cent, or full capacity, in 1888, and 50 establishments, or 58.14 per cent, returning the same proportion of business done in 1889.

WEEKS IN OPERATION: BY INDUSTRIES.

A full working year consists of 306 days, or 51 weeks, omitting 52 Sundays and seven holidays. A number of establishments carried on business for 313 days or 365 days, although there were few of the latter instances. These have been considered as being in operation 52 weeks. Part time was reduced to full time in accordance with the instructions contained in the schedule. Thus, if an establishment ran full time for 26 weeks, half-time for 12 weeks, and two-thirds time for 12 weeks, and stopped two weeks for repairs, the time in operation would be considered as 40 weeks.

The recapitulation on page 108 shows the average number of weeks the 1,364 establishments considered were in operation. In 1888 the average per establishment was 48.38 weeks and in 1889, 48.42 weeks. Those industries which show an average greater than that shown for All Industries in 1889, are as follows: Arms and Ammunition, 49 weeks; Artisans' Tools, 50.25 weeks; Boxes (Paper and Wooden), 49.22 weeks; Burial Cases, Caskets, Coffins, etc., 51 weeks; Buttons and Dress Trimmings, 49.50 weeks; Carpetings, 50.40 weeks; Carriages and Wagons, 49.63 weeks; Chemical Preparations (Compounded), 50.50 weeks; Clothing, 48.60 weeks; Cotton Goods, 49.71 weeks; Cotton, Woollen, and Other Textiles, 48.50 weeks; Dyestuffs, 50 weeks; Emery and Sand Paper and Cloth, etc., 51 weeks; Fertilizers, 51 weeks; Flax, Hemp, and Jute Goods, 49.67 weeks; Food Preparations, 48.70 weeks; Furniture, 48.79 weeks; Hose: Rubber, Linen, etc., 50 weeks; Linen, 49 weeks; Liquors: Malt, Distilled, and Fermented, 49.52 weeks; Lumber, 50 weeks; Machines and Machinery, 50.39 weeks; Mixed Textiles, 50 weeks; Musical Instruments and Materials, 50.48 weeks; Oils and Illuminating Fluids, 50 weeks; Paper and Paper Goods, 49.18 weeks; Print Works, Dye Works, and Bleacheries, 49.06 weeks; Railroad Construction and Equipment, 51 weeks; Rubber and Elastic Goods, 49.25 weeks;

Shipbuilding, 49.50 weeks; Silk and Silk Goods, 50.14 weeks; Stone, 49 weeks; Tallow, Candles, Soap, and Grease, 50.85 weeks; Woollen Goods, 48.57 weeks; and Worsted Goods, 48.94 weeks.

The following industries show an average number of weeks in operation less than that shown for All Industries: Agricultural Implements, 46.60 weeks; Boots and Shoes, 47.17 weeks; Clocks and Watches, 48 weeks; Cooking, Lighting, and Heating Apparatus, 40.50 weeks; Cordage and Twine, 47.33 weeks; Glass, 44.20 weeks; Hosiery and Knit Goods, 48 weeks; Leather, 47.05 weeks; Metals and Metallic Goods, 48.09 weeks; Straw and Palm Leaf Goods, 40.94 weeks; Whips, Lashes, and Stocks, 47 weeks; and Wooden Goods, 48.35 weeks.

We learn from the recapitulation on page 126 that, in 1889, 11 establishments ran 40 weeks, against 56 establishments in 1888, and that 269 establishments ran 50 weeks in the former year as against 227 establishments in the latter year. The next table shows the total number of establishments in the industries considered, and the number of these establishments running the entire year, in 1888 and in 1889.

	18	ss	18	89
Industries.	Total Number of Estab- lishments Con- sidered	Number of Estab- lishments Running the Entire Year (51 Weeks)	Total Number of Estab- lishments Con- sidered	Number of Estab- lishments Running the Entire Year (51 Weeks)
Agricultural implements,	5	3	5	2
Arms and ammunition, . : .	10	5	10	3
Artisans' tools,	8	4	8	6
Boots and shoes,	291	78	291	70
Boxes (paper and wooden),	23	13	23	6
Burial cases, caskets, coffins, etc., .	1	1	1	1
Buttons and dress trimmings,	4	1	4	2 3
Carpetings,	5	2 8	5	3
Carriages and wagons	19	8	19	10
Chemical preparations (compounded),	2	2	2	1
Clothing,	47	26	47	25
Cordage and twine,	12	5	12	2
Cotton goods,	136	109	136	85
Cotton, woollen, and other textiles, .	2	1	2	1
Dyestnffs,	1	1	_	-
Emery and sand paper and cloth, etc.,	2	1	2	2
Fertilizers,	-	~	1	1
Flax, hemp, and jute goods,	3	1	-	-
Food preparations,	74	49	74	50
Furniture,	47	19	47	20

	18	88	18	89
Industries.	Total Number of Estab- lishments Con- sidered	Number of Estab- lishments Running the Entire Year (51 Weeks)	Total Number of Estab- lishments Con- sidered	Number of Estab- lishments Running the Entire Year (51 Weeks)
Glass,	5	1	5	2
Hosiery and knit goods,	11	4	11	$\frac{2}{4}$
Leather,	96	56	96	49
Linen,	3	1	3	1
Liquors: malt, distilled, and fer-				
mented,	23	20	23	17
Machines and machinery,	84	56	84	56
Metals and metallic goods,	122	48	122	42
Mixed textiles,	11	7	11	8
Musical instruments and materials, .	23	15	23	16
Oils and illuminating fluids,	1	1	_	-
Paper and paper goods,	68	42	68	32
Print works, dye works, and bleach-				
eries,	16	8	16	5
Railroad construction and equipment,	_	_	1	1
Rubber and elastic goods,	20	8	20	7
Shipbuilding,	6	$\frac{4}{2}$	6	4
Silk and silk goods,	7	2	7	$\begin{bmatrix} 4\\3\\9 \end{bmatrix}$
Stone,	19	12	19	9
Straw and palm leaf goods,	16	2	16	3
Tallow, candles, soap, and grease, .	13	13	13	10
Wooden goods,	17	7	17	4
Woollen goods,	86	44	86	39
Worsted goods,	16	10	16	12
TOTALS,	1,355	690	1,352	614

For the purposes of this analysis we have included in the above table those establishments which ran 52 weeks. We find that 690 establishments ran the entire year in 1888 and 614 establishments in 1889. In only six industries did the same number of establishments report running 51 weeks in both years; they were, Burial Cases, Caskets, Coffins, etc., one; in Cotton, Woollen, and Other Textiles, one; in Hosiery and Knit Goods, four; in Linen, one; in Machines and Machinery, 56; and in Shipbuilding, four. Reducing the figures in the preceding table to percentages we secure the following:

CLASSIFICATION.	Number o		Percentages	
ODASSITIONI	1888	1889	1888	1889
In operation during the entire year, . In operation less than the entire year,	690 674	614 750	50.59 49.41	$45.01 \\ 54.99$
TOTALS,	1,364	1,364	100.00	100.00

From this table we learn that the establishments were about evenly divided, about one-half reporting that they were busy the entire year both in 1888 and in 1889. The decrease between 1888 and 1889 in the number of establishments running the entire year was 76, or 11.01 per cent.

Consolidating into classes the figures for establishments on page 126, we secure, for All Industries, the following table:

IN OPI	RATIO	ξ.			Percentages		
			1888	1889	1888	1889	
			1	1	0.07	0.07	
		.	1	6	0.07	0.44	
		.	16	14	1.18	1.03	
		.	43	50	3.15	3.67	
		.	386	410	28.30	30.06	
			227	269	16.64	19.72	
		.	675	565	49.49	41.42	
		.	15	49	1.10	3.59	
			1,364	1,364	100.00	100.00	
				IN OPERATION. 1888	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	IN OPERATION. ISSN ISN	

It will be seen from this table that the range was from under 10 weeks to 52 weeks, and that the consolidation of establishments is largest between 40 and 51 weeks, inclusive. It is thus apparent that the majority of the establishments considered were busy practically the entire year.

Selecting the same industries for which analysis tables were given when considering proportion of business done, we present, for number of weeks in operation, a series of industry tables, the first relating to Boots and Shoes.

CLASSIFICATION OF WEEKS I	CICATION OF WEEKS IN OPERATION.				OF ESTAB- ENTS	Percentages	
				1888	1889	1888	1889
Under 10 weeks, .					_	_	_
10 but under 20 weeks,				_	1	_	0.3
20 but under 30 weeks,				3	4	1.03	1.3
30 but under 40 weeks,			.	15	15	5.16	5.10
10 but under 50 weeks,			.	138	137	47.42	47.0
50 weeks,			.	57	64	19.59	21.9
51 weeks,				78	69	26.80	23.7
52 weeks,				-	1	-	0.3
Totals,				291	291	100.00	100.0

It is apparent from this table that the majority of the establishments ran almost the entire year in both 1888 and 1889, 138 and 137 establishments, or 47.42 per cent and 47.08 per cent, respectively, so reporting. We find by reference to the analysis table, on page 235, that the greatest number of establishments in this industry turned out between 60 and 80 per cent of the possible production of their establishments.

The next table relates to Cotton Goods.

CLASSIFICATION OF WEEKS I	и Орг	RATIO	N.	NUMBER O	OF ESTAB- IENTS	PERCENTAGES	
				1888	1889	1888	1889
Under 10 weeks, .				_		_	_
10 but under 20 weeks,				-	_	-	_
20 but under 30 weeks,				_	1	_	0.74
30 but under 40 weeks,			.	1	3	0.74	2.21
40 but under 50 weeks,			.	10	27	7.35	19.85
50 weeks,				16	20	11.76	14.70
51 weeks,				108	81	79.41	59.56
52 weeks,				1	4	0.74	2.94
TOTALS,				136	136	100.00	100.00

The majority of the establishments in this industry ran the entire year in 1888 and in 1889, and did business up to the full extent of their capacity, as we learn from the analysis table on page 236.

The next table relates to the leather industry.

Classification of Weeks	IN OPE	PATIO?	٧.	NUMBER OF ESTAB- LISHMENTS		PERCENTAGES	
CZMODITORION OF WEEK				1888	1889	1888	1889
Under 10 weeks, .				_	1	_	1.04
10 but under 20 weeks,				1	2	1.04	2.08
20 but under 30 weeks,				3	2	3.13	2.08
30 but under 40 weeks,				4	7	4.17	7.29
10 but under 50 weeks,				18	20	18.75	20.83
50 weeks,				14	15	14.58	15.63
51 weeks,				56	46	58.33	47.92
52 weeks,			٠.	-	3	-	3.13
TOTALS,				96	96	100.00	100.00

The greatest consolidation in this table is found opposite 51 weeks, indicating that the majority of the establishments

were busy during the entire year, although their output was not commensurate with the time employed, for we find by reference to the analysis table on page 236 that the range of production in both 1888 and 1889 was from 50 to 80 per cent.

A similar table is given for Metals and Metallic Goods.

Classification of Weeks	IV OPE	ERATIO	N	NUMBER OF ESTAB- LISHMENTS		PERCENTAGES	
				1888	1889	1888	1889
Under 10 weeks, .				-	_	_	_
10 but under 20 weeks,			.	_	-	_	_
20 but under 30 weeks,			.	-	_	_	_
30 but under 40 weeks,				2	7	1.64	5.74
40 but under 50 weeks,				53	49	43.44	40.16
50 weeks,		•		19	24	15.57	19.67
51 weeks,				48	40	39.35	32.79
52 weeks,	,	•		-	2	-	1.64
Totals,				122	122	100.00	100.00

The range in this industry is from 30 weeks to 52 weeks. We find that there are two periods distinctly marked, which represent the running time of nearly half the number of establishments; in 1888, 53 establishments, or 43.44 per cent, and in 1889, 49 establishments, or 40.16 per cent are noted against the line 40 weeks but under 50 weeks, while an almost equal number is given for both years opposite the line 51 weeks. The greatest range in proportion of business done as shown in the analysis table on page 237 is between 60 and 100 per cent.

The closing industry table is devoted to Woollen Goods.

CLASSIFICATION OF WEEKS I	n Ope	RATION			OF ESTAB- IENTS	Percentages	
				1888	1889	1888	1889
Under 10 weeks, .				_	_	_	_
10 but under 20 weeks,				_	_	_	_
20 but under 30 weeks,			.	1	1	1.16	1.16
30 but under 40 weeks,			.	2	2	2.33	2.33
40 but under 50 weeks,				20	29	23.26	33.72
50 weeks,				19	15	22.09	17.44
51 weeks,				44	37	51.16	43.02
52 weeks,		•		-	2	-	2.33
Totals,			.	86	86	100.00	100.00

The range in this industry is from 20 to 52 weeks, although the greatest condensation is seen between 40 and 51 weeks in both years. Nearly the same number that returned the proportion of business done as 100 per cent, in the analysis table on page 237, also reported 51 weeks as the length of time in operation.

In the recapitulation on page 109 the average proportion of business done in the different industries may be compared with the average number of weeks the 1,364 establishments were in operation. The following industries report running the full year, or 51 weeks, in 1889, and the respective proportions of business done: Burial Cases, Caskets, Coffins, etc., 75 per cent; Emery and Sand Paper and Cloth, etc., 90 per cent; Fertilizers, 20 per cent; and Railroad Construction and Equipment, 75 per cent.

The industries which reported running 50 weeks but under 51 weeks, exhibit respective average proportions of business done as follows: Artisans' Tools, 80.75 per cent; Carpetings, 89 per cent; Chemical Preparations (Compounded), 50 per cent; Dyestuffs, 50 per cent; Hose: Rubber, Linen, etc., 75 per cent; Lumber, 75 per cent; Machines and Machinery, 74.89 per cent; Mixed Textiles, 80.55 per cent; Musical Instruments and Materials, 78.65 per cent; Oils and Illuminating Fluids, 75 per cent; Silk and Silk Goods, 90.29 per cent; and Tallow, Candles, Soap, and Grease, 79.92 per cent.

The following industries report running 40 weeks or over but under 50 weeks, in 1889, and show the respective proportions of business done as indicated: Agricultural Implements, 77.61 per cent; Arms and Ammunition, 54.50 per cent; Boots and Shoes, 71.53 per cent; Boxes (Paper and Wooden), 76.30 per cent; Buttons and Dress Trimmings, 53.25 per cent; Carriages and Wagons, 78.42 per cent; Clocks and Watches, 73.50 per cent; Clothing, 76.13 per cent; Cooking, Lighting, and Heating Apparatus, 60 per cent; Cordage and Twine, 77 per cent; Cotton Goods, 93.18 per cent; Cotton, Woollen, and Other Textiles, 87.50 per cent; Flax, Hemp, and Jute Goods, 90 per cent; Food Preparations, 68.34 per cent; Furniture, 73.85 per cent; Glass, 78 per cent; Hosiery and Knit Goods, 70.73 per cent; Leather, 71.55 per cent; Linen, 80.67 per cent; Liquors: Malt, Distilled, and Fermented, 59.78 per cent; Metals and Metallic Goods, 72.29 per cent; Paper and Paper Goods, 89.59 per cent; Print Works, Dye Works, and Bleacheries,

81 per cent; Rubber and Elastic Goods, 76.05 per cent; Shipbuilding, 65.33 per cent; Stone, 64.21 per cent; Straw and Palm Leaf Goods, 68.88 per cent; Whips, Lashes, and Stocks, 70 per cent; Wooden Goods, 71.18 per cent; Woollen Goods, 91.37 per cent; and Worsted Goods, 84.50 per cent.

In the industries in which the average proportion of business done was 80 per cent and over, the average number of weeks in operation is shown as follows: Artisans' Tools, 50.25 weeks; Carpetings, 50.40 weeks; Cotton Goods, 49.71 weeks; Cotton, Woollen, and Other Textiles, 48.50 weeks; Emery and Sand Paper and Cloth, etc., 51 weeks; Flax, Hemp, and Jute Goods, 49.67 weeks; Linen, 49 weeks; Mixed Textiles, 50 weeks; Paper and Paper Goods, 49.18 weeks; Print Works, Dye Works, and Bleacheries, 49.06 weeks; Silk and Silk Goods, 50.14 weeks; Woollen Goods, 48.57 weeks; and Worsted Goods, 48.94 weeks.

It is very evident, judging from these analytical showings, that, so far as the running time was concerned, the majority of the establishments in 1889 were engaged in manufacturing to the fullest capacity. This fact is perhaps more fully brought out in the recapitulation on pages 118 and 119, entitled "Percentages and Weeks," from which we learn that the 248 establishments reporting a production of 75 per cent of greatest capacity worked on an average 49 weeks each; 113 establishments reporting a production of 90 per cent worked 49.17 weeks on an average; and the 279 establishments reporting full production, or 100 per cent, were engaged almost the entire year, or 50.58 weeks on an average. From the recapitulation on page 126, entitled "Weeks and Percentages," it is seen that, in 1888, 675 establishments, out of the 1,364 compared, ran the entire year, or 51 weeks, and did business amounting to 81.81 per cent of their full productive limit, and in 1889, 565 establishments ran the entire year, or 51 weeks, and did business averaging 82.19 per cent of their full limit. In 1888, 917 establishments, more than two-thirds of the total number, ran from 50 to 52 weeks during the year, and did business ranging from 78.39 per cent for those running 50 weeks up to 80.33 per cent for those running 52 weeks. In 1889, 883 establishments ran from 50 to 52 weeks and did business ranging from 76.59 per cent for those running 50 weeks up to 83.24 per cent for those running the entire year.

SUMMARY.

Before inferences are drawn relating to the condition of any industry, all the elements in the case should be carefully considered. We have already referred to the inaccuracy of deductions relating to the rate of wages based either upon total wages paid, or upon average yearly earnings, inasmuch as such averages are, necessarily, obtained by dividing the sum of wages paid by the number representing the average of persons employed. Both the divisor and the dividend vary each year, and the variations result from several causes. A large number of low-priced employés, employed for a short time, would tend to decrease the average earnings, although the rate of wages remained the same; and even should the number of persons employed and

	' Industries.	Ave Yearly	erage Earnings	Average O Persons I	f
		1888	1889	1888	1889
1	Agricultural implements,	\$536.08	\$502.31	636	659
2	Arms and ammunition,	601.83	607.36	1,813	1,648
3	Artisans' tools,	594.71	606.28	693	741
4	Boots and shoes,	502.87	510.41	28,793	29,335
5	Boxes (paper and wooden), .	404.56	415.26	1,187	1,200
6	Burial cases, caskets, coffins, etc.,	266.67	513.00	75	28
7	Buttons and dress trimmings, .	293.39	332.22	271	189
8	Carpetings,	348.28	362.41	3,952	4,102
9	Carriages and wagons,	641.33	572.84	1,039	1,046
10	Chemical preparations (com-			,	
	pounded),	526.36	525.47	25	15
11	Clocks and watches,	687.02	744.74	328	293
12	Clothing,	474.82	421.38	5,331	5,482
13	Cooking, lighting, and heating				
	apparatus,	591.35	527.49	194	199
14	Cordage and twine,	336.55	334.23	2,410	2,663
15	Cotton goods,	324.13	329.33	64,263	65,546
16	Cotton, woollen, and other tex-			· ·	
	tiles	365.02	390.37	2,201	1,996
17	tiles,	872.14	490.24	28	29
18	Emery and sand paper and cloth,				
	etc.,	513.08	477.57	51	58
19	Fertilizers,	416.67	553.33	12	6
20	Flax, hemp, and jute goods, .	302.54	314.09	850	917
21	Food preparations,	440.08	454.85	3,935	3,881
$\overline{22}$	Furniture,	447.35	463.54	3,055	2,655
23	Glass	416.77	432.09	423	476
24	Hose: rubber, linen, etc.,	474.72	443.62	130	146
25	Hosiery and knit goods,	318.25	314.50	2,790	2,333
26	Leather,	535.37	519.82	4,604	4,578
	·				

the rate of wages remain the same in each year, the difference in running time would be sufficient to affect the average yearly earnings. The average number of persons employed, and the range between the smallest and the greatest number employed at any one time, the average proportion of business done, and the average number of weeks in operation, are all factors in the problem. To bring these several factors clearly before the reader the following table has been prepared. It shows, for the establishments considered in each industry, the average yearly earnings, the average number of persons employed, the smallest number of persons employed, the greatest number of persons employed, the average proportion of business done, and the average number of weeks in operation, for the years 1888 and 1889, arranged so as to be compared easily.

	e Number of Operation		Proportion of ss Done	Average I Busines	f	Greatest Persons I	f	Smallest Persons E
	1889	, 1888	1889	1888	1889	1888	1889	1888
	46.60 49.00	48.00 49.20	77.61 54.50	$\begin{vmatrix} 75.00 \\ 62.10 \end{vmatrix}$	687 1,790	691 1,989	623 1,524	556 1,603
1 5	50.25	47.13	80.75	74.13	792	741	677	646
1 4	47.17	46.64	71.53	70.93	33,942	34,929	24,082	21,349
1	49.22	49.65	76.30	71.78	1,325	1,380	1,074	973
(51.00	51.00	75.00	75.00	30	84	26	50
	49.50	49.00	53.25	63.75	245	410	132	139
	50.40	49.20	89.00	90.60	4,325	4,143	3,478	3,627
,	49.63	47.63	78.42	74.84	1,179	1,203	884	743
10	50.50	51.00	50.00	74.00	23	28	11	12
	48.00	49.00	73.50	73.50	330	337	115	317
	48.60	48.66	76.13	78.21	6,643	6,434	4,067	3,962
	40.50	47.00	60.00	77.50	206	211	187	177
	47.33	48.25	77.00	75.42	3,327	2,755	1,860	1,577
18	49.71	50.45	93.18	95.45	68,086	66,629	61,596	59,801
16	48.50	50.50	87.50	95.00	2,142	2,307	1,872	2,095
17	50.00	51.00	50.00	50.00	30	30	28	28
	51.00	50.50	90.00	67.50	76	56	50	43
	51.00	40.00	20.00	50.00	20	20	1	5
	49.67	44.33	90.00	78.33	1,052	892	757	822
	$\begin{vmatrix} 48.70 \\ 48.79 \end{vmatrix}$	$\frac{49.09}{49.72}$	68.34	73.68	4,631	5,017	3,109	2,897
	$\frac{48.79}{44.20}$	49.72	$73.85 \\ 78.00$	74.81 88.00	$2,949 \\ 564$	3,259 - 510	$2,236 \\ 348$	$2,\!572$ 130
	50.00	50.00	75.00	60.00	180	200	110	$\frac{130}{105}$
	48.00	45.45	70.73	68.45	2,899	3.923	1,757	1,970
	47.05	47.94	71.55	73.77	5,356	5,286	3,609	3,629

	Industries.	Ave Yearly	erage Earnings		Number of Employed
		1888	1889	1888	1889
1	T:	. \$302.29	\$305.44	951	899
$\frac{1}{2}$	Linen, Liquors: malt, distilled, and fer		ф505.44	301	033
4		699.18	731.51	652	641
3	mented,	500.00	454.55	22	11
4	Machines and machinery, .	542.03	561.27	10,403	11,060
5	Metals and metallic goods,	485.70	501.61	12,763	12,974
$\check{6}$	Mixed textiles,	358.49	382.11	1,022	959
7	Musical instruments and ma-				
	terials,	. 669.32	690.68	2,204	2,264
8	Oils and illuminating fluids,	. 600.00	571.43	34	. 35
9	Paper and paper goods, .	. 406.97	408.07	6,886	6,950
10	Print works, dye works, and	l			
	bleacheries,	. 381.94	464.56	4,263	3,700
11		•			
	ment,	. 413.12	475.16	41	45
12	Rubber and elastic goods, .	. 449.08	414.10	5,832	6,221
13	Shipbuilding,	$. \mid 655.95$	621.58	454	421
14	Silk and silk goods,	. 318.35	332.99	2,337	2,273
15	Stone,	554.61	598.51	1,405	1,228
16	Straw and palm leaf goods,	. 383.18	394.75	2,049 441	$1,842 \\ 478$
17	Tallow, candles, soap, and grease	100 10	443.48 558.41	87	66
18		488.10	481.59	928	902
19 20	Wooden goods,	395.84	364.34	13,941	14,119
$\begin{bmatrix} 20 \\ 21 \end{bmatrix}$	Worsted goods,	356.24	361.99	3,110	3,376
21	Horsion goods,	000.21	301.00	0,110	
22	ALL INDUSTRIES,	\$413.19	\$419.17	198,914	200,685

For convenience we shall separate the industries represented in this table into four classes. First, those showing an increase in the average number of weeks in operation and in the average proportion of business done in 1889 as against 1888; second, those showing an increase in the average number of weeks in operation and a decrease in the average proportion of business done; third, those showing a decrease in the average number of weeks in operation but a greater average proportion of business done; and fourth, those showing a decrease in the average number of weeks in operation and in the average proportion of business done.

In the following analysis of each of these classes the percentages of increase or decrease in proportion of business done are based upon the total productive capacity of the establishments, and are not to be understood as percentages of increase or decrease based upon the aggregate value of goods manufactured in 1888.

	Number of Operation		Proportion of ss Done	0	Number of Employed		Number of Employed	(
	1889	1888	1889	1888	1889	1888	1889	1888
1	49.00	49.33	80.67	84.00	958	1,020	858	870
2	49.52	48.65	59.78	62.78	719	748	587	568
3	50.00	49.00	75.00	90.00	16	28	5	16
1	50.39	50.08	74.89	72.58	12,198	11,531	9,849	9,218
5	48.09	48.31	72.29	73.35	14,421	14,080	11,396	11,152
6	50.00	50.27	80.55	82.82	1,052	1,138	870	914
7	50.48	49.74	78.65	78.65	2,481	2,397	2,088	2,009
8	50.00	51.00	75.00	67.00	44	43	23	25
9	49.18	49.37	89.59	92.28	7,387	7,224	6,487	6,474
10	49.06	49.25	81.00	82.38	4,640	4,728	3,653	3,224
11	51.00	47.00	75.00	70.00	53	46	38	13
12	49.25	49.35	76.05	75.35	6,843	6,482	5,087	5,246
13	49.50	46.33	65.33	48.83	582	845	319	307
14	50.14	49.71	90.29	90.00	2,371	2,488	2,156	2,108
15	49.00	49.89	64.21	67.74	1,480	1,848	920	1,034
16	40.94	37.94	68.88	76.13	3,128	3,364	422	304
17	50.85	51.00	79.92	78.69	536	488	428	403
18	47.00	48.00	70.00	80.00	68	104	63	69
19	48.35	47.12	71.18	68.18	1,014	1,140	782	668
20	48.57	48.88	91.37	91.40	15,013	14,668	12,751	12,613
21	48.94	46.88	84.50	83.44	3,616	3,433	3,102	2,547
22	48.42	48.38	76.74	77.52	221,449	221,307	176,097	169,610

The following industries comprise the first class:

Artisans' Tools.

Boots and Shoes.

Burial Cases, Caskets, Coffins, etc.
Carriages and Wagons.

Emery and Sand Paper and Cloth, etc.
Flax, Hemp, and Jute Goods.
Hose: Rubber, Linen, etc.
Hosiery and Knit Goods.

Machines and Machinery.

Musical Instruments and Materials.

Railroad Construction and Equipment.

Shipbuilding.

Silk and Silk Goods.

Wooden Goods.

Worsted Goods.

In Artisans' Tools the increase for the time the establishments were in operation amounts to 3.12 weeks, and the increase in proportion of business done to 6.62 per cent of the total productive capacity of the works. In Boots and Shoes and Silk and Silk Goods, the increase in running time and in proportion of business done was very slight, being less than one week and one per cent in each industry. In Carriages and Wagons the increase in time in operation was two weeks and

in proportion of business done 3.58 per cent. In Emery and Sand Paper and Cloth, etc., the establishments were open, on an average, 0.50 weeks longer in 1889 than in 1888, and the proportion of business done was greater by 22.50 per cent of the total productive capacity of the establishments. Hemp, and Jute Goods, the establishments were open 5.34 weeks longer in 1889 than in 1888 and the average proportion of business done was 11.67 per cent greater. In Hosiery and Knit Goods, the increase in running time was 2.55 weeks and the proportion of business done increased 2.28 per cent. Machines and Machinery, the establishments were open, on an average, 0.31 weeks longer in 1889 than in 1888 and the production was increased 2.31 per cent. In Railroad Construction and Equipment, the increase in running time amounted to four weeks and the increase in proportion of business done to five per cent. In Shipbuilding, the establishments were open 3.17 weeks longer in 1889 than in 1888 and the average proportion of business done was 16.50 per cent greater. In Wooden Goods, the increase for the time the establishments were in operation amounted to 1.23 weeks in 1889 as against 1888 and the increase in proportion of business done to three per cent of the full productive capacity. In Worsted Goods, the increase in running time amounted to 2.06 weeks and the increase in proportion of business done to 1.06 per cent. increase in average yearly earnings is shown for Artisans' Tools, Boots and Shoes, Flax, Hemp, and Jute Goods, Machines and Machinery, Railroad Construction and Equipment, Silk and Silk Goods, Wooden Goods, and Worsted Goods; all the other industries show a decrease. The average number of persons employed exhibits an increase in all except Hosiery and Knit Goods, Shipbuilding, Silk and Silk Goods, and Wooden Goods. The range of unemployment, as shown by the difference between the smallest and greatest number of persons employed in any one month, was less in 1889 than in 1888 in all industries in this class except Artisans' Tools, Emery and Sand Paper and Cloth, etc., Flax, Hemp, and Jute Goods, and Machines and Machinery.

We include in the first class the following industries: Burial Cases, Caskets, Coffins, etc., in which the average number of weeks in operation and the average proportion of business done

remained the same in 1889 as in 1888; Hose: Rubber, Linen, etc., in which the average number of weeks in operation remained the same and the average proportion of business done increased 15 per cent; and Musical Instruments and Materials, in which the running time increased 0.74 per cent, while the average proportion of business done remained the same in both years. Of these three industries, Hose: Rubber, Linen, etc., shows a decrease in average yearly earnings, and the other two industries an increase; Burial Cases, Caskets, Coffins, etc., shows a decrease in average number of persons employed while the other two industries show an increase. The range between smallest and greatest number of persons employed was wider in Musical Instruments and Materials, while in the other two industries it was narrower.

If we refer to the table on pages 192 and 193, which shows the value of goods made, we shall find an increase in value of product reported in the following industries of the first class: Artisans' Tools, 2.33 per cent; Boots and Shoes, 3.68 per cent; Emery and Sand Paper and Cloth, etc., 5.35 per cent; Machines and Machinery, 11.79 per cent; Musical Instruments and Materials, 8.69 per cent; Railroad Construction and Equipment, 6.13 per cent; Shipbuilding, 6.36 per cent; Silk and Silk Goods, 11.09 per cent; and Worsted Goods, 5.77 per cent. A decrease is shown in Burial Cases, Caskets, Coffins, etc., of 23.43 per cent; in Carriages and Wagons, of 11.97 per cent; in Flax, Hemp, and Jute Goods, of 2.86 per cent; in Hose: Rubber, Linen, etc., of 16.73 per cent; in Hosiery and Knit Goods, of 13.89 per cent; and in Wooden Goods, of 3.68 per cent.

We may, therefore, summarize the facts as to these industries as follows: In Artisans' Tools and Machines and Machinery we note an increase in running time, in average proportion of business done, in value of goods made, in average number of persons employed, and in average annual earnings, but a wider range between the smallest and greatest number of persons employed. In Boots and Shoes, Railroad Construction and Equipment, and Worsted Goods, an increase is noted in running time, in average proportion of business done, in value of goods made, in average number of persons employed, in average annual earnings, and a narrower range between the smallest and greatest number of persons employed.

In Emery and Sand Paper and Cloth, etc., an increase is shown in weeks in operation, in average proportion of business done, in average number of persons employed, and in the value of goods made; but a wider range between the smallest and greatest number of persons employed, and a decrease in average yearly earnings. An increase in all points considered is shown in Flax, Hemp, and Jute Goods, with the exception of value of goods made, in which a decrease is noted. Carriages and Wagons shows an increase in running time, in average proportion of business done, in average number of persons employed, and a narrower range between smallest and greatest number of persons employed; but a decrease in value of goods made, and in average yearly earnings.

Hosiery and Knit Goods exhibits an increase in running time, in average proportion of business done, and a narrower range between the smallest and greatest number of persons employed: but a decrease in average yearly earnings, in average number of persons employed, and in value of goods made. In Shipbuilding we note an increase in running time, in average proportion of business done, in value of goods made, and a narrower range between smallest and greatest number of persons employed; but a decrease in average yearly earnings, and in the average number of persons employed. In Silk and Silk Goods a decrease appears in the average number of persons employed; in all other points under consideration an increase is shown, and the range between smallest and greatest number of persons employed is narrower. In Wooden Goods we note an increase in running time, in average proportion of business done, in average yearly earnings, and a narrower range between smallest and greatest number of persons employed; but a decrease in the average number of persons employed, and in the value of goods made.

The second class comprises those industries which show an increase in the average number of weeks in operation and a decrease in the average proportion of business done; they are as follows:

Buttons and Dress Trimmings. Carpetings. Fertilizers. Glass. Liquors: Malt, Distilled, and Fermented.Lumber.Straw and Palm Leaf Goods.

In Buttons and Dress Trimmings, the increase in running time amounts to 0.50 weeks, while in average proportion of business done a decrease of 10.50 per cent appears. In Carpetings, in 1889, the establishments were open on an average 1.20 weeks longer than in 1888, but there was a decrease in proportion of business done of 1.60 per cent. Notwithstanding an increase of eleven weeks in running time, a decrease in proportion of business done of 30 per cent is noted for the industry entitled Fertilizers. Glass shows an increase in running time of 2.60 weeks but a decrease in average proportion of business done of 10 per cent. The increase noted in Liquors: Malt, Distilled, and Fermented in the average number of weeks in operation is slight, being 0.87 weeks, and in the average proportion of business done a decrease of three per cent appears. In Lumber, the increase in running time amounts to one week but in the average proportion of business done a decrease of 15 per cent is shown. In Straw and Palm Leaf Goods the increase in running time was three weeks but in the average proportion of business done there was a decrease of 7.25 per cent. Analyzing these industries as to earnings we find that in 1889, as against 1888, the average yearly earnings were greater in all except Lumber, while the average number of persons employed was less in all save Carpetings and Glass. The range between the smallest and greatest number of persons employed was wider in Carpetings and Fertilizers and narrower in all the other industries in this class.

An increase in the value of goods made in 1889 as compared with 1888 is shown in Carpetings and in Glass of 9.52 per cent and 11.65 per cent, respectively. A decrease is shown in Buttons and Dress Trimmings of 24.70 per cent; in Liquors: Malt, Distilled, and Fermented, of 0.98 per cent; in Lumber, of 37.32 per cent; and in Straw and Palm Leaf Goods, of 12.30 per cent. No change in the value of goods made is shown for Fertilizers in 1889 as compared with 1888.

Summarizing the data respecting this class we find that Buttons and Dress Trimmings shows an increase in running time, in average annual earnings, and a narrower range between the smallest and greatest number of persons employed; the points showing a decrease are average proportion of business done, average number of persons employed, and value of goods

In Carpetings an increase is shown for all the points considered with the exception of average proportion of business done, in which a decrease appears, and the range between the smallest and greatest number of persons employed, which is wider. We note that an increase in running time and in average yearly earnings is shown in Fertilizers, the value of goods made remaining the same; a decrease in the average proportion of business done and in the average number of persons employed is seen, and a slightly wider range between the smallest and greatest number of persons employed. Glass is noted an increase in running time, in average yearly earnings, in average number of persons employed, in value of goods made, and a narrower range between the smallest and greatest number of persons employed; the only point in which a decrease appears is in the average proportion of business done.

In Liquors: Malt, Distilled, and Fermented and Straw and Palm Leaf Goods we note an increase in running time, in average yearly earnings, and a narrower range between the smallest and greatest number of persons employed, but a decrease in average proportion of business done, in average number of persons employed, and in value of goods made. In Lumber, a decrease is shown for all the points considered, except running time, in which there is an increase, and in the range between the smallest and greatest number of persons employed, which is slightly narrower.

The third class comprises those industries reporting a decrease in the average number of weeks in operation but a greater average proportion of business done. In this class are included the following:

Agricultural Implements. Boxes (Paper and Wooden). Cordage and Twine. Oils and Illuminating Fluids. Rubber and Elastic Goods. Tallow, Candles, Soap, and Grease.

The decrease in running time did not exceed one week except in Agricultural Implements, in which the establishments ran on the average 1.40 weeks less in 1889 than in 1888. The increase in proportion of business done was less than two per cent in Cordage and Twine, Rubber and Elastic Goods, and

Tallow, Candles, Soap, and Grease. In Agricultural Implements it amounted to 2.61 per cent, in Boxes (Paper and Wooden) to 4.52 per cent, and in Oils and Illuminating Fluids to eight per cent. An increase in average yearly earnings is noted only in Boxes (Paper and Wooden). All of the industries in this class show an increase in the average number of persons employed, although the range between smallest and greatest number of persons employed was wider in all except Agricultural Implements and Boxes (Paper and Wooden). The following industries show an increase in the value of goods made: Agricultural Implements, 2.25 per cent; Boxes (Paper and Wooden), 1.64 per cent; Cordage and Twine, 27.26 per cent; and Tallow, Candles, Soap, and Grease, 9.35 per cent. The only industries which show a decrease on this point are Oils and Illuminating Fluids 2.94 per cent and Rubber and Elastic Goods 3.46 per cent.

Summarizing these facts we find that in Agricultural Implements a decrease in running time and in average yearly earnings is shown, together with an increase in average proportion of business done, in average number of persons employed, and in value of goods made; a narrower range is also shown between the smallest and greatest number of persons employed. In Boxes (Paper and Wooden) an increase is shown in all of the points considered except the average number of weeks in operation, in which a decrease appears; the range between the smallest and greatest number of persons employed in this industry is much less in 1889 than in 1888. In Cordage and Twine and Tallow, Candles, Soap, and Grease, a decrease is noted in running time, and in average yearly earnings; a wider range is shown between smallest and greatest number of persons employed, while the average proportion of business done, the average number of persons employed, and the value of goods made, all show an increase. The same facts apply to Oils and Illuminating Fluids and Rubber and Elastic Goods, except in the value of goods made, where a decrease is shown instead of an increase.

The fourth class comprises those industries which exhibit a decrease both in average number of weeks in operation and in average proportion of business done. They are as follows:

Arms and Ammunition. Chemical Preparations (Compounded).

Clocks and Watches.

Clothing.

Cooking, Lighting, and Heating Apparatus.

Cotton Goods.

Cotton, Woollen, and Other Textiles.

Dyestuffs.

Food Preparations.

Furniture. Leather. Linen.

Metals and Metallic Goods.

Mirrod Torrilos

Mixed Textiles.

Paper and Paper Goods.

Print Works, Dye Works, and Bleacheries.

Stone.

Whips, Lashes, and Stocks.

Woollen Goods.

We have included within the limits of this class Clocks and Watches and Dyestuffs, although the average proportion of business done remained the same in both years. The decrease in running time, in this class, is very slight indeed; in only one industry does it exceed two per cent, that of Cooking, Lighting, and Heating Apparatus, where the decrease is 6.50 weeks. In 1889 as compared with 1888 the average proportion of business done was 7.60 per cent less in Arms and Ammunition, 24 per cent less in Chemical Preparations (Compounded), 2.08 per cent less in Clothing, 17.50 per cent less in Cooking, Lighting, and Heating Apparatus, 2.27 per cent less in Cotton Goods and in Mixed Textiles, 7.50 per cent less in Cotton, Woollen, and Other Textiles, 5.34 per cent less in Food Preparations, 0.96 per cent less in Furniture, 2.22 per cent less in Leather, 3.33 per cent less in Linen, 1.06 per cent less in Metals and Metallic Goods, 2.69 per cent less in Paper and Paper Goods, 1.38 per cent less in Print Works, Dye Works, and Bleacheries, 3.53 per cent less in Stone, ten per cent less in Whips, Lashes, and Stocks, and 0.03 per cent less in Woollen Goods.

All the industries in this class show an increase in average yearly earnings except Chemical Preparations (Compounded), Clothing, Cooking, Lighting, and Heating Apparatus, Dyestuffs, Leather, and Woollen Goods. The average number of persons employed is less in all except Clothing, Cooking, Lighting, and Heating Apparatus, Cotton Goods, Dyestuffs, Metals and Metallic Goods, Paper and Paper Goods, and Woollen Goods. The range between the smallest and greatest number of persons employed in 1889 as compared with 1888 was wider in Clocks and Watches, Clothing, Cotton, Woollen, and Other Textiles,

Furniture, Leather, Metals and Metallic Goods, Paper and Paper Goods, and Woollen Goods, and narrower in Arms and Ammunition, Chemical Preparations (Compounded), Cooking, Lighting, and Heating Apparatus, Cotton Goods, Food Preparations, Linen, Mixed Textiles, Print Works, Dye Works, and Bleacheries, Stone, and Whips, Lashes, and Stocks.

The following industries show an increase in the value of goods made: Arms and Ammunition, 0.33 per cent; Clocks and Watches, 7.27 per cent; Cotton Goods, 4.11 per cent; Dyestuffs, 6.30 per cent; Metals and Metallic Goods, 10.16 per cent; Mixed Textiles, 35.38 per cent; Paper and Paper Goods, 5.01 per cent; Print Works, Dye Works, and Bleacheries, 2.82 per cent; and Woollen Goods, 1.93 per cent. The following industries show a decrease: Chemical Preparations (Compounded), 14.91 per cent; Clothing, 5.29 per cent; Cooking, Lighting, and Heating Apparatus, 6.84 per cent; Cotton, Woollen, and Other Textiles, 8.82 per cent; Food Preparations, 6.39 per cent; Furniture, 1.37 per cent; Leather, 4.92 per cent; Linen, 8.35 per cent; Stone, 1.82 per cent; and Whips, Lashes, and Stocks, 4.68 per cent.

Summarizing the points brought out, we find that in Arms and Ammunition, Mixed Textiles, and Print Works, Dye Works, and Bleacheries, there was a decrease in running time, in average proportion of business done, and in average number of persons employed; an increase in average yearly earnings, in value of goods made, and a narrower range between the smallest and greatest number of persons employed in 1889 as compared with 1888. The same facts obtain in Food Preparations, Linen, Stone, and Whips, Lashes, and Stocks, except that the value of goods made shows a decrease. In Chemical Preparations (Compounded) a decrease is noted in all of the points considered except in the range between the smallest and the greatest number of persons employed, which is slightly A decrease is noted in all points considered, im the leather industry, and the range between the smallest and greatest number of persons employed is wider.

In Clocks and Watches, a decrease is shown in running time, in average number of persons employed, and a wider range between the smallest and greatest number of persons employed; an increase in average yearly earnings and in the value of goods

made is also seen, while the average proportion of business done The only point in the clothing industry remains the same. where an increase is shown is in the average number of persons employed; all other points show a decrease and the range between the smallest and greatest number of persons employed was wider in 1889 than in the preceding year. facts apply to Cooking, Lighting, and Heating Apparatus, except that the range between the smallest and greatest number of persons employed was narrower. In Cotton Goods we note a decrease in running time and in average proportion of business done; an increase in average yearly earnings, in average number of persons employed, and in value of goods made; the range between the smallest and greatest number of persons employed was much narrower in 1889 than in the year 1888.

In Cotton, Woollen, and Other Textiles and Furniture an increase in average yearly earnings is seen, together with a slightly wider range between the smallest and greatest number of persons employed; a decrease is shown for all other points. In Dyestuffs the same average proportion of business done and the same range between smallest and greatest number of persons employed is seen, with a decrease in running time and in average yearly earnings, and an increase in the average number of persons employed and in the value of goods made. With the exception of a decrease in running time and in average proportion of business done, all points considered show an increase in Metals and Metallic Goods and in Paper and Paper Goods; the range between the smallest and greatest number of persons employed was wider in both years. These same facts apply to Woollen Goods, with the exception of average yearly earnings which in this industry shows a decrease.

In All Industries we note an increase in running time, in average yearly earnings, in average number of persons employed, and in value of goods made; the range between smallest and greatest number of persons employed is much narrower in 1889 than in 1888. A decrease is shown in only one point, namely, average proportion of business done.

In order that due emphasis may be given to our statement that all the varying elements in an industry must be considered when drawing deductions from the tables presented in this volume relating to wages, we append the following text tables. They show the industries just analyzed, arranged in the four classes for 1889 and shown in conjunction with a similar classification for 1888, published in the report on the Statistics of Manufactures for 1888.

First Class.

[The following industries, comprising the first class, show an increase in the average number of weeks in operation and in the average proportion of business done.]

1888.

Cordage and Twine.

Cotton Goods.

Cotton, Woollen, and Other Tex-

Food Preparations.

Paper and Paper Goods.

Shipbuilding.

1889.

Artisans' Tools.

Boots and Shoes.

Burial Cases, Caskets, Coffins, etc.

Carriages and Wagons.

Emery and Sand Paper and Cloth, etc.

Flax, Hemp, and Jute Goods. Hose: Rubber, Linen, etc. Hosiery and Knit Goods. Machines and Machinery.

Musical Instruments and Materials.

Railroad Construction and Equipment.

Shipbuilding.

Silk and Silk Goods.

Wooden Goods.

Worsted Goods.

Second Class.

[The following industries, comprising the second class, show an increase in the average number of weeks in operation and a decrease in the average proportion of business done.]

1888.

Agricultural Implements.

Chemical Preparations (Compound-

Cooking, Lighting, and Heating

Apparatus. Furniture.

Hosiery and Knit Goods.

Machines and Machinery.

Metals and Metallic Goods.

Oils and Illuminating Fluids.

Print Works, Dye Works, Bleacheries.

Stone.

Tallow, Candles, Soap, and Grease.

Woollen Goods.

Worsted Goods.

1889.

Buttons and Dress Trimmings.

Carpetings.

Fertilizers.

Glass.

Liquors: Malt, Distilled, and Fermented.

Lumber.

Straw and Palm Leaf Goods.

Third Class.

[The following industries, comprising the third class, show a decrease in the average number of weeks in operation but a greater average proportion of business done.]

1888.

Boots and Shoes. Clocks and Watches.

Liquors: Malt, Distilled, and Fermented.

Wooden Goods.

Agricultural Implements. Boxes (Paper and Wooden).

Cordage and Twine.

Oils and Illuminating Fluids. Rubber and Elastic Goods.

Railroad Construction and Equipment. Tallow, Candles, Soap, and Grease.

Fourth Class.

[The following industries, comprising the fourth class, show a decrease in the average number of weeks in operation and in the average proportion of business done.]

1888.

Arms and Ammunition.

Artisans' Tools.

Boxes (Paper and Wooden). Buttons and Dress Trimmings.

Carpetings.

Carriages and Wagons.

Clothing.

Flax, Hemp, and Jute Goods.

Hose: Rubber, Linen, etc.

Leather. Linen.

Mixed Textiles.

Musical Instruments and Materials. Rubber and Elastic Goods.

Silk and Silk Goods.

Straw and Palm Leaf Goods.

Arms and Ammunition.

Chemical Preparations (Compound-

Clocks and Watches.

Clothing.

Cooking, Lighting, and Heating Apparatus.

Cotton Goods.

Cotton, Woollen, and Other Textiles.

Dvestuffs.

Food Preparations.

Furniture. Leather. Linen.

Metals and Metallic Goods.

Mixed Textiles.

Paper and Paper Goods.

Print Works, Dye Works, and Bleach-

eries.

Whips, Lashes, and Stocks.

Woollen Goods.

We note that the shipbuilding industry appeared in the first class in the report for 1888 as well as in the present volume, and that the following industries are included in the fourth class in both volumes: Arms and Ammunition, Clothing, Leather, Linen, and Mixed Textiles.

The next table brings graphically before the reader a comparison as to the increase, decrease, or no change in 1889, as compared with 1888, in the amount of capital invested, value of goods made, total amount of wages paid, and average number of persons employed.

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	Increase (4 in 1889	-), Decreas As Compai	E(-), or No ED WITH 18	Change (=) 88 in —
Industries	Amount of Capital Invested	Value of Goods Made	Total Amount of Wages Paid	Average Number of Persons Employed
Agricultural implements,	+	+	_	+
Arms and ammunition,	1	1	_	_
Artisans' tools,	_	+	+	+
Boots and shoes,	_	+	<u> </u>	+
Boxes (paper and wooden),	+	+	+	+
Burial cases, caskets, coffins, etc.,		_		
Buttons and dress trimmings,	+	_		_
Carpetings,	+	+	+	+
Carriages and wagons,			_	1
Chemical preparations (compounded),				
Clocks and watches,	+	+	_	_
Clothing,	+	<u>'</u>		+
Cooking, lighting, and heating apparatus,	+			+
Cordage and twine,	+	+	+	
Cotton goods,	T	+	+	+
Cotton, woollen, and other textiles, .				_
Dyestuffs,	=	+		+
Emery and sand paper and cloth, etc.,	-	+	+	-+
Fertilizers,				
Flax, hemp, and jute goods,	+	_	+	+
Food preparations,	+		+	
Furniture,	· <u>_</u>	_	<u> </u>	
Glass,	+	+	+	+
Hose: rubber, linen, etc.,	=	_	+	
Hosiery and knit goods,	+			1
Leather,			_	
Linen,	_			
Liquors: malt, distilled, and fermented	_		+	
Lumber,	<u>'</u>	_		_
Machines and machinery,	_	+	+	+
Metals and metallic goods,	+	+	+	+
Mixed textiles,	+	+	+	
Musical instruments and materials, .		+	+	+
Oils and illuminating fluids,		_	_	1
Paper and paper goods,	+	+	+	1
Print works, dye works, and bleach-		,		
cries,	+	+	+	_
Railroad construction and equipment,		1	+	+

		Increase (+ in 1889	-), Decreasi as Compai	E(-), OR NO CED WITH 18	CHANGE (=), 88 IN -
Industries.		Amount of Capital Invested	Value of Goods Made	Total Amount of Wages Paid	Average Number of Persons Employed
Rubber and elastic goods,		_	_	_	+
Shipbuilding,		+	+		_
Silk and silk goods,		+	+	+	
Stone,		+	_	_	_
Straw and palm leaf goods, .		_	_	_	_
Tallow, candles, soap, and grease	, .	_	+	+	+
Whips, lashes, and stocks,		_	_	. —	
Wooden goods,		+	_	_	_
Woollen goods,		_	+	+	+
Worsted goods,		+	+	+	+
All Industries,			+	+	+

No extended analysis is needed for this table. Its salient points are seen at a glance. An increase in the amount of capital invested, value of goods made, total amount of wages paid, and average number of persons employed, is seen in Boxes (Paper and Wooden), Carpetings, Cordage and Twine, Emery and Sand Paper and Cloth, etc., Glass, Metals and Metallic Goods, Paper and Paper Goods, and Worsted Goods. increase in all, except capital invested, is seen in Artisans' Tools, Boots and Shoes, Cotton Goods, Machines and Machinery, Musical Instruments and Materials, Railroad Construction and Equipment, Tallow, Candles, Soap, and Grease, and Woollen Goods. An increase in all, except goods made, is seen in Flax, Hemp, and Jute Goods. An increase in all points, except wages paid, is seen in Agricultural Implements. An increase in all, except persons employed, is noted in Mixed Textiles, Print Works, Dye Works, and Bleacheries, and Silk and Silk Goods. An increase in capital invested and persons employed, and a decrease in goods made and wages paid, is seen in Clothing and in Cooking, Lighting, and Heating Apparatus. increase in capital invested and wages paid, and a decrease in goods made and persons employed, is noted in Food Preparations. We see that in Dyestuffs there was an increase in the value of goods made but no change in capital invested, and while an increase is shown in the average number of persons employed, a decrease appears in the total amount of wages paid. In Hose: Rubber, Linen, etc., a decrease is seen in the value of goods made, but no change in capital invested; the average number of persons employed and the total amount of wages paid both show an increase. An increase in capital invested and goods made, with a decrease in wages paid and persons employed, is shown in Clocks and Watches and Shipbuilding.

The following industries show a decrease in amount of capital invested, in value of goods made, in total amount of wages paid, and in average number of persons employed: Burial Cases, Caskets, Coffins, etc., Chemical Preparations (Compounded), Cotton, Woollen, and Other Textiles, Furniture, Leather, Linen, Lumber, Straw and Palm Leaf Goods, and Whips, Lashes, and Stocks. A decrease in all, except capital invested, is seen in Buttons and Dress Trimmings, Hosiery and Knit Goods, Stone, and Wooden Goods; a decrease in all, except goods made, is shown for Arms and Ammunition and Fertilizers; a decrease in all, except wages paid, is noted in Liquors: Malt, Distilled, and Fermented; and a decrease is noted for all points except persons employed in Carriages and Wagons and Rubber and Elastic Goods. A decrease in goods made and wages paid, an increase in persons employed, but no change in capital invested, is shown for Oils and Illuminating Fluids.

In the previous volumes in this series, the term "Stock Used" has comprised the principal articles or materials entering into the fabric or structure of the goods manufactured in the various industries. As stated on page 189 of this analysis, beside the principal articles there are other materials consumed in manufacturing, such as coal, chemicals, oil, light, and other minor articles. The schedule for 1889 called for all the articles used, and upon the basis of the data contained within these schedules, we have, as before stated, been able to estimate the value of the other articles of stock used in 1888. This was done in order to make comparisons, for a number of the leading industries, between 1888 and 1889, as will be shown in the following pages. We have separated the principal articles of stock used from the other articles as returned for 1889, and present the following table which shows for seven leading

industries the value of the principal articles of stock used, the value of other articles of stock used, and the aggregate value of all stock used, for 1889.

			LUE OF STOCK USED		
Industries.,			Principal Articles	Other Articles	Total
Boots and shoes, Carpetings, Cotton goods, Leather, Metals and metallic goods, Woollen goods,		•	\$29,900,910 3,648,656 42,749,200 8,261,530 8,764,464 14,224,100	\$6,279,954 387,958 5,953,324 1,518,513 2,074,329 2,572,812	\$36,180,864 4,036,614 48,702,524 9,780,043 10,838,793 16,796,912
Worsted goods,	•	•	4,671,913	405,436	5,077,349

The value of "Goods Made" given in this report, and often referred to in this analysis under the general term of "product," is, of course, the gross value, or, in other words, the gross product of the establishments considered. If from this we take the value of principal articles of stock and other materials consumed in the processes of manufacture, in each classified

	Industries.			Number of Estab- lishments Considered	Amount of Capital Invested	Average Number of Persons Employed
1 2 3 4 5 6 7	Boots and shoes, Carpetings, Cotton goods, Leather, Metals and metallic goods, Woollen goods,	 	:	291 5 136 96 122 86 16	\$19,718,474 6,961,595 99,835,838 6,707,767 18,427,331 23,134,159 4,980,822	29,335 4,102 65,546 4,578 12,974 14,119 3,376

From this table we learn that the efficiency of capital, measured by the value of industry product turned out during the year for every \$1,000 invested, was greatest in the boot and shoe industry, the amount of industry product per \$1,000 of capital being \$1,201.84. Next to this industry ranks Metals and Metallic Goods, in which the value of industry product for each \$1,000 of capital invested was \$758.60. Leather comes next, the value of industry product per \$1,000 of capital being \$646.19. Following these are Woollen Goods, Worsted Goods,

industry, we shall have remaining the actual result of the productive forces in the industry, that is, the product created above the value of the stock and materials consumed, by the union of labor and capital, and this remainder may aptly be termed an "industry product" to distinguish it from the total value of goods made given in all the foregoing tables, wherever product is mentioned.

One part of this industry product goes to the workingman, as labor's share of the product, in the form of wages. The other part remains as a fund from which are paid profits, freights, insurance, interest on loans (credit capital), interest on stock (fixed or invested capital), rents, commissions, salaries, etc. This fund may be termed a "profit and minor expense" fund.

With these explanations concerning value of stock and materials used, value of goods made, industry product, and profit and minor expense fund, we can intelligently consider the following comparisons for the seven leading industries as to the productive capacity of the employés and the efficiency of capital; also the percentage of industry product paid in wages, and the percentage devoted to other expenses, in the year 1889.

Total Wages		Profit	Industry	Product	PERCENT. INDUSTRY		=
Paid During the Year	Industry Product	and Minor Expense Fund	Per \$1,000 of Capital	Average per Employé	Devoted to Profit and Minor Expenses	Paid in Wages	
\$14,972,926 1,486,620 21,586,277 2,379,715 6,507,947 5,144,114 1,222,078	\$23,697,853 2,391,902 35,877,239 4,334,617 13,978,811 10,441,390 1,912,348	\$8,724,927 905,282 14,290,962 1,954,902 7,470,864 5,297,276 690,270	\$1,201.84 343.57 359.36 646.19 758.60 451.34 383.93	\$807.84 583.11 547.36 946.84 1,077.45 739.53 566.45	36.82 37.85 39.83 45.10 53.44 50.73 36.10	63.18 62.15 60.17 54.90 46.56 49.27 63.90	$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{bmatrix}$

Cotton Goods, and Carpetings, in which the value of industry product per \$1,000 of capital invested was, respectively, \$451.34, \$383.93, \$359.36, and \$343.57.

The greatest average value of industry product for the year per employé is found in Metals and Metallic Goods, the amount being \$1,077.45. Next to this comes Leather, the average industry product per employé being \$946.84, and next to this, Boots and Shoes, in which the average industry product per employé was \$807.84. Woollen Goods follows with an aver-

age industry product per employé of \$739.53. Carpetings, Worsted Goods, and Cotton Goods show an average industry product per employé of \$583.11, \$566.45, and \$547.36, respectively.

The worsted goods industry ranks highest as to the percentage of industry product annually paid in wages, the proportion being 63.90 per cent; it is followed closely by Boots and Shoes in which the percentage of industry product paid in wages was 63.18. Next in order ranks Carpetings, the percentage being 62.15, and then Cotton Goods, the percentage being 60.17. In Leather the percentage of industry product paid in wages was 54.90, and in Woollen Goods and Metals and Metallic Goods, 49.27 and 46.56, respectively.

The largest margin of industry product devoted annually to profit and minor expenses is found in Metals and Metallic Goods, the percentage being 53.44; the smallest is in Worsted Goods, in which the percentage is 36.10. In Woollen Goods the percentage devoted to this fund is 50.73, and in Leather 45.10. In Cotton Goods, Carpetings, and Boots and Shoes, the percentages of industry product devoted to profit and minor expenses are 39.83, 37.85, and 36.82, respectively.

It is possible to make comparisons for these seven leading industries for the years 1888 and 1889. We have therefore prepared separate industry presentations, the first of which relates to Boots and Shoes.

Boots and Shoes. [Comparisons for 291 Establishments.]

CLASSIFICATION.	1888	1889
Amount of capital invested,	\$19,922,965	\$19,718,474
Value of goods made (gross product),	\$57,755,697	\$59,878,717
Value of principal articles of stock used,	\$28,826,376	\$29,900,910
Other materials used in production,	\$6,055,526	\$6,279,954
Industry product (gross product less value of	# = , = = , = = =	# - , ,
stock and materials),	\$22,873,795	\$23,697,853
Wages (labor's direct share of product),	\$14,479,276	\$14,972,926
Profit and minor expense fund (industry prod-	Ψ11,1.0,2.0	411,012,020
uct less wages),	\$8,394,519	\$8,724,927
Percentage of industry product paid in wages,	63.30	63.18
Percentage of industry product devoted to	00.00	05.10
	36.70	36.82
profit and minor expenses,	30.70	00.02
Percentage of profit and minor expense fund of	40.10	11.05
capital,	42.13	44.25

The percentage of industry product devoted to profit and minor expenses may be taken as a fair measure of the condition of an industry. If we examine the presentation for Boots and Shoes we shall find that, in 1889, the conditions were practically the same as in the preceding year, for in 1889, 36.82 per cent was devoted to this purpose as against 36.70 per cent in 1888. There was a slight difference, 2.12 per cent, between 1888 and 1889 in the percentage of profit and minor expense fund of capital. Both of these comparisons indicate that, from the standpoint of the manufacturer, business was as profitable in 1889 as it was in 1888. It will also be noted that the percentage of industry product paid in wages each year was about the same, being 63.30 and 63.18 in 1888 and 1889, respectively.

The next presentation relates to Carpetings.

Carpetings. [Comparisons for 5 Establishments.]

CLASSIFICATION.	1888	1889
Amount of capital invested,	\$6,370,460	\$6,961,595
Value of goods made (gross product),	\$5,869,546	\$6,428,516
Value of principal articles of stock used,	\$3,147,374	\$3,648,656
Other materials consumed in production,	\$334,572	\$387,958
Industry product (gross product less value of		
stock and materials),	\$2,387,600	\$2,391,902
Wages (labor's direct share of product),	\$1,356,649	\$1,486,620
Profit and minor expense fund (industry product	# - , ,-	
less wages),	\$1,030,951	\$905,282
Percentage of industry product paid in wages,	56.82	62.15
Percentage of industry product devoted to profit		
and minor expenses,	43,18	37.85
Percentage of profit and minor expense fund of	10.10	0
capital,	16.18	13.00

In this industry we find that the conditions were somewhat better in 1888 than in 1889, if we take for a basis the percentage of industry product devoted to profit and minor expenses. The percentage of profit and minor expense fund of capital was also greater in 1888 than in 1889, the percentages being, respectively, 16.18 and 13.00. From the standpoint of the manufacturer business was not so profitable in 1889 as it was in 1888, while from the workingman's standpoint the reverse is true, the percentage of industry product paid in wages being 62.15 in 1889 as against 56.82 in 1888.

The following table brings out the facts for Cotton Goods.

Cotton Goods.	[Comparisons	for 136	Establishments.]
---------------	--------------	---------	------------------

1888	1889
\$103 154 838	\$99,835,838
	\$84,579,763
	\$42,749,200
	\$5,953,324
\$37,592,729	\$35,877,239
\$20,829,680	\$21,586,277
	" '
\$16,763,049	\$14,290,962
55.41	60.17
44.59	39.83
16.25	14.31
	\$103,154,838 \$81,238,283 \$38,312,041 \$5,333,513 \$37,592,729 \$20,829,680 \$16,763,049 55.41 44.59

Practically the same conditions rule in this industry as in Carpetings. The percentage of industry product devoted to profit and minor expenses, and the percentage of profit and minor expense fund of capital, being greater in 1888 than in 1889; while the percentage of industry product paid in wages was greater in 1889 than in 1888, showing that from the standpoint of labor the results were in its favor.

A presentation for the leather industry follows:

Leather. [Comparisons for 96 Establishments.]

Classification.	1888	1889
Amount of capital invested,	\$7,451,528	\$6,707,767
Value of goods made (gross product),	\$14,845,650	\$14.114,660
Value of principal articles of stock used,	\$7,136,087	\$8,261,530
Other materials consumed in production,	\$1,602,482	\$1,518,513
Industry product (gross product less value of	\$1,002,102	41,010,010
stock and materials),	\$6,107,081	\$4,334,617
Wages (labor's direct share of product),	\$2,464,855	\$2,379,715
Profit and minor expense fund (industry prod-	Ψ2,101,000	Ψ2,0.0,.10
uct less wages),	\$3,642,226	\$1,954,902
Percentage of industry product paid in wages,.	40.36	54.90
Percentage of industry product devoted to profit	40.00	04.50
referringe of industry product devoted to profit	59.64	45.10
and minor expenses,	99.04	40.10
Percentage of profit and minor expense fund	10 00	90 14
of capital,	48.88	29.14
	l	

The percentage of industry product devoted to profit and minor expenses in 1888 was 59.64, and in 1889, 45.10. The percentage of profit and minor expense fund of capital was 48.88 in 1888, and 29.14 in 1889. This difference is extremely large and indicates that, in 1889, from the standpoint of the manufacturer, business was not so profitable as in 1888, but from that of the workingman it was much more so, the percentage of industry product paid in wages being 54.90 in 1889 as against 40.36 in 1888.

The following table relates to Metals and Metallic Goods:

Metals and Metallic Goods. [Comparisons for 122 Establishments]

CLASSIFICATION.	1888	1889
Amount of capital invested,	\$17,969,546	\$18,427,331
Value of goods made (gross product),	\$22,528,617	\$24,817,604
Value of principal articles of stock used,	\$8,794,376	\$8,764,464
Other materials consumed in production,	\$2,114,068	\$2,074,329
Industry product (gross product less value of	*,,	#-,
stock and materials),	\$11,620,173	\$13,978,811
Wages (labor's direct share of product),	\$6,198,941	\$6,507,947
Profit and minor expense fund (industry prod-	1 - , ,	***************************************
uct less wages),	\$5,421,232	\$7,470,864
Percentage of industry product paid in wages,	53.35	46.56
Percentage of industry product devoted to profit		
and minor expenses,	46.65	53.44
Percentage of profit and minor expense fund		00,11
of capital,	30.17	40.54
T		1

We have previously noted in this Analysis that, in this industry, there was more capital invested, a larger product, and a larger amount disbursed in wages in 1889 than in 1888. When we come to analyze the proportions of industry product devoted to profit and minor expenses we find that, in 1889, 53.44 per cent was used for this purpose as against 46.65 per cent in 1888; we also note an increase of 10.37 per cent in the percentage of profit and minor expense fund of capital. On the other hand, we find a smaller proportion of industry product paid out in wages in 1889 than in 1888, the percentages being 46.56 and 53.35, respectively. From the standpoint of the manufacturer the year 1889 was more prosperous than the preceding year; while from the standpoint of the laborer the reverse is true.

A similar comparison follows for Woollen Goods:

Woollen Goods. [Comparisons for 86 Establishments.]

CLASSIFICATION.	1888	1889
Amount of capital invested,	\$24,848,267	\$23,134,159
Value of goods made (gross product),	\$26,721,808	\$27,238,302
Value of principal articles of stock used,	\$13,191,935	\$14,224,100
Other materials consumed in production,	\$2,386,646	\$2,572,812
Industry product (gross product less value of		, ,
stock and materials),	\$11,143,227	\$10,441,390
Wages (labor's direct share of product),	\$5,016,460	\$5,144,114
Profit and minor expense fund (industry prod-	# - , ,	, , , , , , , , , , , , , , , , , , , ,
uct less wages),	\$6,126,767	\$5,297,276
Percentage of industry product paid in wages,.	45.02	49.27
Percentage of industry product devoted to profit		
and minor expenses,	54.98	50.73
Percentage of profit and minor expense fund	01.00	
of capital,	24.66	22.90
or ouplier,	. 21.00	22.00

The percentage of industry product devoted to profit and minor expenses in 1888 was 54.98, and in 1889, 50.73; and the percentage of profit and minor expense fund of capital was 24.66 in 1888, and 22.90 in 1889. The percentage of industry product paid in wages was 45.02 in 1888, and 49.27 in 1889. These slight variations indicate that although the conditions were somewhat better for the workingman in 1889 than in 1888, they were not materially different in either year.

The closing presentation relates to Worsted Goods.

Worsted Goods. [Comparisons for 16 Establishments.]

CLASSIFICATION.	1888	1889
Amount of capital invested,	\$4,827,893	\$4,980,822
Value of goods made (gross product),	\$6,608,195	\$6,989,697
Value of principal articles of stock used,	\$4,201,284	\$4,671,913
Other materials consumed in production,	\$364.851	\$405,436
Industry product (gross product less value of	" ,	
stock and materials),	\$2,042,060	\$1,912,348
Wages (labor's direct share of product),	\$1,107,899	\$1,222,078
Profit and minor expense fund (industry product	# -,·,	1 -,,
less wages),	\$934,161	\$690,270
Percentage of industry product paid in wages,	54.25	63.90
Percentage of industry product devoted to profit	01.20	00.00
and minor expenses,	45.75	36.10
Percentage of profit and minor expense fund of	10.10	00.10
•, •	19.35	13.86
capital,	19.00	10.00

The percentage of industry product paid in wages was 54.25 in 1888, and 63.90 in 1889. The percentage of industry product devoted to profit and minor expenses in 1888 was 45.75, and in 1889, 36.10. The percentage of profit and minor expense fund of capital was 19.35 in 1888, and 13.86 in 1889. The comparisons show that, in this industry, a larger share of the industry product went to labor in 1889 than in 1888, and a somewhat smaller share to capital.

For purposes of quick comparison, we bring forward from the tables on pages 54 to 126 the principal facts relating to the seven leading industries together with those facts which are given in this Analysis. Each one of the tables which follow shows the number of private firms, the number of corporations, the number of partners, the number of stockholders, the amount of capital invested, the value of stock used (that given for 1888 is, in every instance, the total value as estimated on the basis of the returns for 1889, an explanation of which is given on page 189), the value of goods made, the average, the smallest, and the greatest number of persons employed, the total amount of wages paid, the average yearly earnings, the average proportion of business done, and the average number of weeks in operation, for the years 1888 and 1889. The increases or decreases in the latter as compared with the previous year are noted by amounts and percentages.

Boots and Shoes [291 Establishments.]

CLASSIFICATION.	1888	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
Number of private firms, . Number of corporations, . Number of partners, . Number of stockholders, . Amount of capital invested, Value of stock used, . Value of goods made, . Persons employed: Average number, . Smallest number, . Greatest number, . Total amount of wages paid, Average yearly earnings, . Proportion of business done, Weeks in operation, .	280 11 536 172 \$19,922,965 \$34,881,902 \$57,755,697 28,793 21,349 34,920 \$14,479,276 \$502.87 70.93 46.64	16 512 512 \$19,718,474 \$36,180,864 \$59,878,717 29,335 24,082 33,942 \$14,072,926 \$510.41	+5 -24	+53.49 -1.03 $+3.72$ $+3.68$ $+1.88$ $+12.80$ -2.83 $+3.41$ $+1.50$ $+0.85$

Carpetings [5 Establishments.]

CLASSIFICATION.	1888	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
Number of private firms, Number of corporations, Number of partners, Number of stockholders, Amount of capital invested, Value of stock used, Value of goods made, Persons employed: Average number, Smallest number, Greatest number, Total amount of wages paid, Average yearly earnings, Proportion of business done, Weeks in operation,	1 4 1 1 869 \$6,370,460 \$3,481,946 \$5,869,546 \$3,627 4,143 \$1,356,649 \$348.28 90.60 49.20	1 4 1 1 865 \$6,961,595 \$4,036,614 \$6,428,516 4,102 3,478 4,325 \$1,486,620 \$362,41 89,00 50,40		+15.93 $+9.52$ $+3.80$ -4.11 $+4.39$ $+9.58$ $+4.06$

Cotton Goods [136 Establishments.]

	V		The second secon	
CLASSIFICATION.	1888	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
Number of private firms, . Number of corporations, . Number of partners, . Number of stockholders, . Amount of capital invested, Value of stock used, . Value of goods made, . Persons employed: Average number, . Smallest number, . Greatest number, . Total amount of wages paid, Average yearly earnings, . Proportion of business done, Weeks in operation, .	37 99 77 15,206 \$103,154,838 \$43,645,524 \$81,238,283 64,263 59,801 66,629 \$20,829,680 \$324.13 95.45 50.45	100 70 16,203 \$99,835,838 \$48,702,524 \$84,579,763 65,546 61,596 68,086 \$21,586,277 \$329.33 93.18	+997 -\$3,319,000	

Leather [96 Establishments.]

CLASSIFICATION.	1888	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
Number of private firms, . Number of corporations, . Number of partners, Number of stockholders, . Amount of capital invested, Value of stock used, Value of goods made,	92 4 178 50 \$7,451,528 \$8,738,569 \$14,845,650	\$9,780,043	$\begin{array}{c} -1 \\ +1 \\ -4 \\ +66 \\ -\$743,761 \\ +\$1,041,474 \\ -\$730,990 \end{array}$	$\begin{array}{r} -1.09 \\ +25.00 \\ -2.25 \\ +132.00 \\ -9.98 \\ +11.92 \\ -4.92 \end{array}$

Leather [96 Establishments] — Concluded.

CLASSIFICATION.	1888	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
Persons employed: Average number, Smallest number, Greatest number, Total amount of wages paid, Average yearly earnings, Proportion of business done, Weeks in operation,	4,604	4,578	-26	-0.56
	3,629	3,609	-20	-0.58
	5,286	5,856	+70	+1.35
	\$2,464,855	\$2,879,715	-\$85,140	-3.46
	\$535.37	\$519.82	-\$15.55	-2.90
	78.77	71.55	-2.22	-3.05
	47.94	47.05	-0.89	-1.86

Metals and Metallic Goods [122 Establishments.]

Classification.	1888 •	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
Number of private firms, .	74	73	-1	-1.3
Number of corporations, .	48			+2.08
Number of partners,	150	141		-6.00
Number of stockholders, .	1,225	1,331	+106	+8.68
Amount of capital invested,	\$17,969,546	\$18,427,331		
Value of stock used,	\$10,908,444	\$10,838,793	-\$69,651	
Value of goods made,	\$22,528,617	\$24,817,604	+\$2,288,987	
Persons employed:		, ,		1
Average number,	12,763	12,974	+211	+1.6
Smallest number,	11,152	11,396	+244	+2.19
Greatest number,	14,080	14,421	-341	-2.43
Total amount of wages paid,	\$6,198,941	\$6,507,947	+\$309,006	
Average yearly earnings, .	\$485.70	\$501.61	+\$15.91	+3.29
Proportion of business done,	73.35		-1.06	-1.4
Weeks in operation,	48.31	48.09	-0.22	

Woollen Goods [86 Establishments.]

CLASSIFICATION.	1888	1889	Increase (+), or Decrease (-), in 1889	Percent- ages
	,		1	
Number of private firms, .	61	59	-2	-3.28
Number of corporations, .	25	27	+2	+8.00
Number of partners,	107	96	-11	-10.28
Number of stockholders, .	903	949	+46	1.5.05
Amount of capital invested,	\$24,848,267	\$28,134,159	-\$1,714,108	-6.90
Value of stock used,	\$15,578,581	\$16,796,912	+\$1,218.331	+7.85
Value of goods made,	\$26,721,808	\$27.238.302		+1.9:
Persons employed:	***************************************	***************************************	1 "	
Average number,	13,941	14,119	+178	± 1.28
Smallest number,	12,613	12,751	±138	+1.09
Greatest number,	14,668	15,013	-345	+2.35
Total amount of wages paid,	\$5,016,460	\$5,144,114	+\$127,654	+2.54
Average yearly earnings, .	\$395.84		-\$31.50	
Proportion of business done,	91.40	d	_0.03	-0.0:
Weeks in operation,	48.88	48.57	-0.31	-0.63

Weeks in operation.

Total amount of wages paid,

Average yearly earnings, . .

Proportion of business done,

Classification.	1888	1889	Increase (+), or Decrease (-), in 1889
Number of private firms, .	9	8	-1 -11.11
Number of corporations,	7	8	$\begin{array}{c c} -1 & -11.11 \\ +1 & +14.29 \end{array}$
Number of partners,	17	16	-1 -5.88
Number of stockholders, .	162	164	+2 +1.23
Amount of capital invested, .	\$4,827,893	\$4,980,822	+\$152,929 +3.17
Value of stock used,	\$4,566,135	\$5,077,349	+\$511,214 + 11.20
Value of goods made,	\$6,608,195	\$6,989,697	+\$381,502 +5.77
Persons employed:			
Average number,	3,110	3,376	+266 $+8.55$
Smallest number,	2,547	3,102	+555 + 21.79
Greatest number,	3,433	3,616	+183 +5.33

\$1,107,899

\$356.24

.83.44

46.88

-\$114,179

+\$5.75+1.06 +2.06

-10.31+1.61 +1.27

+4.39

\$1,222,078

\$361.99

84.50

48.94

Worsted Goods [16 Establishments.]

The returns permit the following condensed general statements as regards the years 1888 and 1889, for 1,364 establishments .

- The decrease of capital devoted to production in 1889 as compared with 1888, amounted to 1.44 per cent. increase in the value of goods made reached 2.45 per cent.
- 2. In 1888 the average number of persons employed in all the establishments represented was 198,914, and the average number of persons employed in the same establishments in 1889 was 200,685; this is an increase of 0.89 per cent in the average number employed. The number of persons employed at the periods of employment of the greatest number shows an increase of only 0.06 per cent in 1889 as compared with 1888, while the number employed at periods of employment of the smallest number shows an increase of 3.82 per cent. range of unemployment was greater in 1888 than in 1889, the number unemployed at some period, of longer or shorter duration, in the former year being 51,697 as against 45,352 in the latter year, a decrease in 1889 of 12.27 per cent. average number of persons employed in each establishment during 1889 was 147; the average number employed during each month of the year, in each establishment, ranged from 145. persons to 148 persons.

3. The average yearly earnings per individual, without regard to sex or age, employed in the 47 industries were \$413.19 in 1888, and \$419.17 in 1889. The range from highest to lowest average yearly earnings was from \$872.14 to \$266.67 in 1888, and from \$744.74 to \$305.44 in 1889. The higher earnings ruled in the industries demanding greater skill and employing males chiefly, and the lower in factory industries employing a large proportion of females and young persons.

4. The average proportion of business done reached 77.52 per cent in 1888 and 76.74 per cent in 1889, of the full productive capacity of the 1,364 establishments compared. In 1888, 917 establishments, and in 1889, 883 establishments

ran practically the entire year.

The conditions outlined in this general statement are predicated upon data from the specified number of representative establishments making returns both in 1888 and in 1889, thereby permitting direct comparisons to be made for identical establishments upon the same basis for each year.









